

FINAL REPORT AND CERTIFICATIONS

151845

**SITE PREPARATION AND
MATERIAL REMOVAL**

ZIONSVILLE, INDIANA

VOLUME I OF III

PREPARED FOR

**ECC TRUST
DEERFIELD, ILLINOIS**

PREPARED BY

**AWD TECHNOLOGIES, INC.
PITTSBURGH, PENNSYLVANIA**

AWD PROJECT NUMBER 2396

JANUARY 1994

March 4, 1994

Ms. Karen Vendl
U.S. Environmental Protection Agency, Region V
77 West Jackson Blvd.
Chicago, IL 60604

RE: EnviroChem Superfund Site
Site Preparation and Material Removal Final Report and Certifications

Dear Karen:

Thank you for your February 24, 1994 letter which acknowledged receipt of the partial submittal of the Final Report and Certifications for the Site Preparation and Material Removal. The EnviroChem Trustees hereby transmit the complete Final Report and Certifications. This complete report includes the missing documents listed in your February 24, 1994 letter; however, we did not resubmit the site photographs. Please consider the site photographs in the partial submittal part of the complete report transmitted herein. In addition, we have sent, via overnight delivery, copies of the complete report to James R. Smith of Indiana Department of Environmental Management and Tim Harrison of CH2M-Hill.

Thank you for your patience. Please call if you have any questions or comments.

Very truly yours,



Roy O. Ball, Ph.D., P.E.
Trustee

Enclosure

cc: James R. Smith, IDEM, w/ enclosure
Tim Harrison, CH2M-Hill, w/enclosure
John Kyle, Barnes and Thornburg, w/o enclosure
Norman W. Bernstein, Bernstein & Assoc., w/o enclosure
Saverio DeBartolo, AWD, w/o enclosure



ERM-NORTH CENTRAL, INC.

Letter of Transmittal

540 LAKE COOK ROAD, SUITE 300, DEERFIELD, ILLINOIS 60015 (708) 940-7200

TO: CH2M-Hill
310 W. WISCONSIN AVE.
SUITE 700
MILWAUKEE, WI
53201-2090

DATE	3/4/94	PROJ. NO.	9320423
ATTENTION	TIM HARRISON		
RE:	ENVIRONMENTAL SITE		

WE ARE SENDING YOU:

- Attached Under separate cover via _____ the following items:
- Shop drawings Technical Paper Prints Plans
- Copy of letter Samples Specifications REPORT

COPIES	DATE	NO.	DESCRIPTION
1	3/4/94	-	SPMR FINAL REPORT AND CERTIFICATIONS

THESE ARE TRANSMITTED AS CHECKED BELOW:

- For approval Approved as submitted Resubmit _____ copies for approval
- For your use Approved as noted Submit _____ copies for distribution
- As requested Returned for corrections Return _____ corrected prints
- For review and comment _____

REMARKS _____

COPY TO FILE SIGNED [Signature]

If enclosures are not as noted, please notify us immediately

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U AGGREGATE TICKETS

ATTACHMENTS

- 1 **SITE PHOTO ALBUM**
- 2 **AS BUILT DRAWINGS**

- Given only to Karen Vendl/USEPA

1.0 SUMMARY OF CONSTRUCTION ACTIVITY

1.1 Partial Tank Relocation and Initial Site Grubbing

In order to perform the site survey, approximately half of the 53 tanks on site had to be relocated away from the remedial boundary line. Initial grubbing and fence removal were also required to facilitate the location of the remedial boundary and exclusion zone boundary.

1.2 Initial Site Survey

The initial site survey established the remedial boundary, the exclusion zone boundary, the support zone limits as well as the location of the construction and security fences and the drainage ditches. The initial survey also established the grade elevations in the support zone to be used in the cut and fill operations.

1.3 Debris Sampling

Samples were taken within the process building of porous materials to determine contamination levels of those materials. One sample of wood, styrofoam insulation, concrete block and fiberglass insulation were procured and analyzed per the design specifications. The analysis determined that the contamination levels of these materials were below hazardous levels. This information was submitted to The Indiana Department of Environmental Management (IDEM) and was used by IDEM to classify these materials as Special Waste. Complete analytical results are located in Appendix G.

Although the A-frame building was not suspect as hazardous, an asbestos survey of the building materials was performed in order to satisfy landfill disposal requirements. The results of this survey were negative and the material was accepted by the landfill as Special Waste. Complete analytical results are located in Appendix G.

The boiler housed within the process building was considered hazardous, but samples were taken (see Appendix G) of residue on the boiler burner chamber wall and the chamber end seal door and analyzed as required for landfill treatment and disposal requirements. Additionally, the burner end flange gasket material was analyzed for asbestos. Chamber wall and door seal

sample analysis revealed hazardous levels of lead contamination and the gasket material was confirmed as containing asbestos. Complete analytical results are located in Appendix G.

Three steel tanks had notations indicating the possible presence of polychlorinated biphenyls (PCBs). Wipe samples from the internal surfaces of these tanks were analyzed for PCBs. Tank T-21 sample results indicated AROCHLOR 1248 at 6 micrograms for the 100 square centimeter wipe sample. Tank T-16 results indicated AROCHLOR 1248 at 2.4 micrograms for the 100 square centimeter wipe sample. Tank T-33 test results indicated all PCB AROCHLORS below detectable limits. Complete results are located in Appendix G.

1.4 Support Zone Grade Surface Preparation

Approximately 1,400 lineal feet of existing fence was removed and discarded. Small shrubs and trees were removed from the support zone area and disposed of as Special Waste. Redistribution of soil within the support zone was accomplished to maintain the intent of west to east flow of surface runoff.

1.5 Construction Fence Installation

Approximately 1,400 lineal feet of high visibility construction fence was installed to establish a working perimeter around the site.

1.6 Support Zone Preparation

Upon completion of the soil grading in the support zone, geotextile fabric was placed and topped with an 8-inch thick compacted layer of No. 2 stone and a 4-inch thick compacted layer of No. 53 stone.

Diversion channels were excavated to the specified invert elevations and the concrete culvert pipe was placed at gate entrances.

Electric power was connected to the site with the exception of the 240 volt 3 phase. Three automatic security lights were installed on new poles within the support zone.

A concrete decontamination pad complete with precast manhole collection sump and splash shields was constructed to the design specifications, elevations and coordinates.

A wastewater storage pad consisting of the specified geomembrane and compacted stone was constructed to house the wastewater holding tanks and contain possible leakage or the total contents of one of the holding tanks in the event of a rupture.

Site support trailers and telephone service was supplied upon availability of completed support zone.

1.7 Miscellaneous Site Debris Removal and Drum Relocation

Miscellaneous debris from within the remedial boundary was marshalled to a central location adjacent to the process building and removed from the site and disposed of as Special Waste.

Approximately 20 randomly located drums were gathered from within the remedial boundary and placed on the existing concrete drum storage pad with the other remaining drums.

1.8 Structure Demolition

The remaining portion of the process building and the A-frame building were demolished to grade and materials were segregated and prepared for disposal.

1.9 Material Removal

Non-porous materials including process building siding, process building structural steel, 53 steel tanks and other miscellaneous non-porous site debris were cut into manageable pieces, pressure washed on the decontamination pad, loaded into rolloff boxes and transported to steel remelt facilities (Minski or Lusco).

Porous and clearing and grubbing materials were loaded into 13 rolloff boxes and transported to Waste Management's Danville, Indiana landfill for disposal as Special Waste. The process building boiler was demolished and loaded into two hazardous waste roll off boxes and transported to Chem Waste Management's Adam Center Disposal facility in Fort Wayne, Indiana for treatment and disposal.

1.10 Security Fence

Approximately 1,400 lineal feet of 10 feet high security fence and four gates were placed around the perimeter of the site outside the diversion channels. This fence was connected to the existing fence on the east side of the site.

1.11 Changes Affecting Final Site Conditions

The following is a list of changes to the final site conditions and the reasons for those changes:

- Due to changes in the cut and fill quantities in the support zone, the support zone was regraded as necessary to permit proper drainage.
- Due to the presence of large stones and rubble in the areas of the diversion channels, design profiles for these channels could not be constructed. Therefore, the channels were excavated as ditches to their final profiles. Material removed to create these ditches was placed north and east of the remedial boundary.
- Due to the soil instability, the section of the South Diversion Channel at the point where the South Support Zone Diversion Channel intersects was filled with No. 2 stone to maintain flow.
- Due to the discovery of soil contamination while constructing the South Support Zone Diversion Channel, work was halted in that area and the ditch left open and incomplete.
- For safety reasons, the security fence was placed to the west of the Parcel 45 North Diversion Channel and south of the South Diversion Channels.
- In order to facilitate the installation of the Wastewater Storage Pad, the location of the pad was moved 2 feet south of its designed location.
- To prevent unnecessary change to neighboring properties, the Access Road Upgrade Area was moved 14 feet northeast of its designed location.

- For pipeline integrity reasons, the 6-inch PVC valve was placed inside the manhole.
- Electrical 440 volt 3 wire electrical services was deleted from the scope of work

2.0 SUMMARY STATEMENT

AWD Technologies, Inc. has completed the Site Preparation and Material Removal in accordance with the plans and specifications as modified by Requests of Field Change, Field Work Orders, Design Changes and as directed by ECC's site representative.

Resident Superintendent


James R. Fife

Contractor Quality Control Manager


Scott Weishaar

3.0 FINAL CERTIFICATION
OF COMPLETION

ECC SITE
ZIONSVILLE, INDIANA
PROJECT NUMBER 2396

To: ECC Trust Date: _____
Attn: ECC Trust's Engineer
From: Saverio F. DeBartolo

This is to certify that I, Saverio F. DeBartolo am an authorized
official of AWD Technologies, Inc.
working in the capacity of Remedial Contractor Project Manager
and have been properly authorized by said firm or corporation to sign the following statements
pertaining to the subject contract:

I know of my own personal knowledge, and do hereby certify, that
the work of the Contract described above has been performed, and
materials used and installed in every particular, in accordance
with, and in conformity to, the Contract Drawings and
Specifications.

The Contract work is now complete in all parts and requirements,
and ready for your final inspection.

By: 

Title: Director of Remedial Services

For: _____

Distribution: 1. Resident Superintendent
2. CQC Manager

4.0 ENVIRONMENTAL CONDITIONS SURVEY REPORT

ENVIRO-CHEM SUPERFUND SITE ZIONSVILLE, INDIANA

The report requirements are discussed in Section 4.2 of the Environmental Control and Maintenance Plan. On Tuesday, August 31, 1993, R. Antio (QEM) and Jim Fife (AWD) walked the Enviro-Chem Superfund site in Zionsville, Indiana and noted the following environmental conditions as shown on the Conditions Survey Layout (attached):

- The area to be used for the south portion of the Support Zone was marshy and wet.
- The existing south drainage ditch flowed from west to east along the south side of the concrete pad. The ditch was filled with cattails and brush.
- The existing north ditch flowed from west to east along the north side of the site. The ditch was free of vegetation.
- The unnamed ditch flowed from north to south along the east side of the site. The ditch channel was relatively clear of vegetation with trees and brush along the banks. Trash was noted in channel and along the banks.
- An orchard is present south of the site on the south side of the Northside Sanitary Landfill access road.

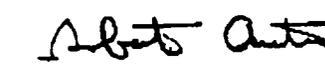
Resident Superintendent


James R. Fife

AWD Technologies, Inc.

3/1/94 (Date)

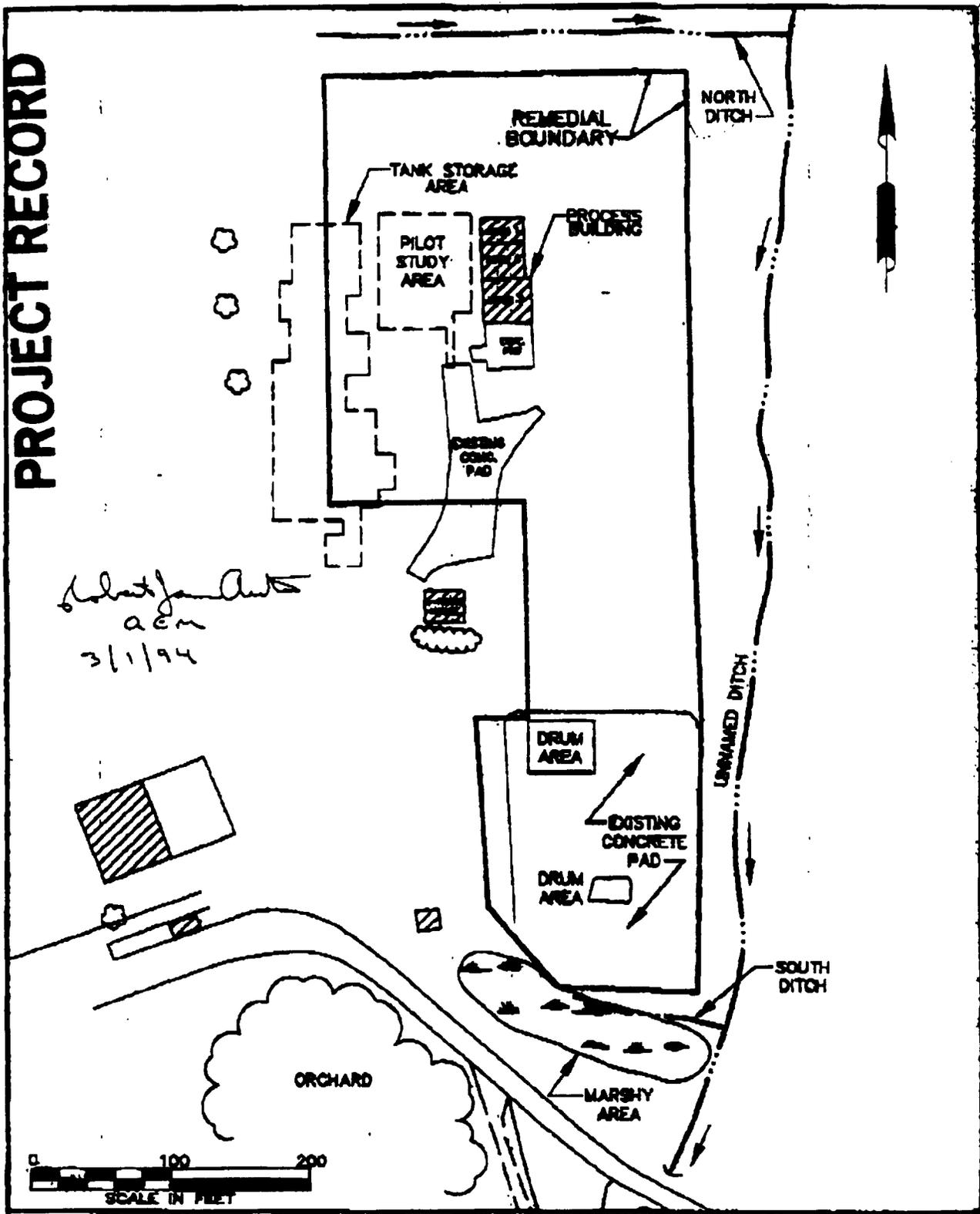
Engineers Representative


Robert Antio

QEM

3/1/94 (Date)

PROJECT RECORD



Robert J. ...
 aem
 3/1/94

0 100 200
 SCALE IN FEET

AWD TECHNOLOGIES, INC



CONDITIONS SURVEY LAYOUT

UNREG. CHEN SUPERFUND SITE
 ZIONSVILLE, IN
 SCALE AS SHOWN 4-1

FILE: 10079004-L076
 2-1985-0-0010

FINAL CERTIFICATION OF COMPLETION REPORT

ECC SITE
ZIONSVILLE, INDIANA
PROJECT NUMBER 2396

Definable Feature of Work:

ACCESS ROAD and SUPPORT ZONE SURFACES
- TECHNICAL SPECIFICATION SECT. 2500, 2200
- DRAWING C-2, C-3, C-8

Including major equipment, material, and/or services:

D-4 DOZER, TRACK LOADER, 20,000 LB VIBRATORY ROLLER
10 OR 16 OZ NONWOVEN GEOTEXTILE PLACED OVER SUBGRADE WITH 2'
OVERLAP. AN 8 IN. LAYER OF IDOH #2 AGGREGATE PLACED OVER GEOTEXTILE
AND COMPACTED WITH ROLLER THEN A 4 IN LAYER OF IDOH #53
AGGREGATE WAS PLACED AND COMPACTED. EDGES FEATHERED TOWARD
DRAINAGE CHANNELS ACCORDING TO DRAWING C-8.

Was accepted/inspected on 12/01/93 by SCOTT WEISHAAR.

Accordingly, _____ certifies all work is completed, with the exception of items listed in attached "punch list", in accordance with the project design documents, and all applicable inspections and construction tests have been satisfactorily completed.



Scott A. Weishaar
Remedial CQC Manager

12/02/93

(Date)



Saverio F. DeBartolo
Remedial Contractor Project Manager

1/25/94

(Date)

FINAL CERTIFICATION OF COMPLETION REPORT

**ECC SITE
ZIONSVILLE, INDIANA
PROJECT NUMBER 2396**

Definable Feature of Work:

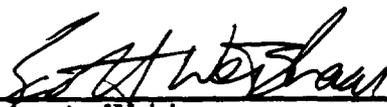
DECONTAMINATION PAD
- TECHNICAL SPECIFICATION SECT. 2090, 3300
- DRAWING C-5

Including major equipment, material, and/or services:

D-4 DOZER, TRACK LOADER, BACK-HOE
AGGREGATE SUBBASE CONSISTED OF 4" OF IDOM #4 AGGREGATE. A PRECAST
CONCRETE SUMP WAS INSTALLED WITH A 6" SCHWENK 90 PVC OVERFLOW
PIPE. NEENAH CAST IRON GRATES, LIDS AND FRAMES WERE INSTALLED, AS
WELL AS PVC WATERSTOPS AND LINK-SEAL. PRESSURE TREATED LUMBER
AND 16OZ NONWOVEN GEOTEXTILE WAS USED IN CONSTRUCTING SIDEWALL
SPLASH GUARDS ACCORDING TO DRAWING C-5. CONCRETE USED WAS S.S BAG
N/A, GRAVEL TYPE III HIGH EARLY STRENGTH W/ SUPERPLASTICIZER

Was accepted/inspected on 12/01/93 by SCOTT WEISHAAR.

Accordingly, SCOTT WEISHAAR certifies all work is completed, with the exception of items listed in attached "punch list", in accordance with the project design documents, and all applicable inspections and construction tests have been satisfactorily completed.


Scott A. Weishaar
Remedial CQC Manager

12/02/93
(Date)


Saverio F. DeBartolo
Remedial Contractor Project Manager

1-25-94
(Date)

CALCULATION WORKSHEET

CLIENT	FILE NO	PROJECT	DATE	BY
Envirochem	2396	SCOTT JEISHAAR	1	1
SUBJECT				
FINAL CERT.	PUNCH LIST		12/02/93	

DECONTAMINATION PAD

1. SUMP OVERFLOW PIPE WAS TO BE SURROUNDED WITH A LINK-SEAL TO CONTROL LEAKAGE. TWO CRACKS DEVELOPED HORIZONTALLY ON THE EAST AND WEST SIDES OF THE SEAL. A POLYMER RESIN WAS APPLIED TO THESE CRACKS AS A LEAK CONTROL.

PROJECT RECORD

FINAL CERTIFICATION OF COMPLETION REPORT

**ECC SITE
ZIONSVILLE, INDIANA
PROJECT NUMBER 2396**

Definable Feature of Work:

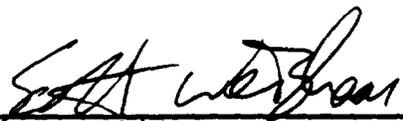
WASTE WATER STORAGE PAD
- TECHNICAL SPECIFICATION SECT 2091
- DRAWING C-6

Including major equipment, material, and/or services:

D-4 DOZER, BACK HOE
AND PLACED 1002 GEOTEXTILE ON PAD SUBGRADE. LEE TAYLOR PLACED 60mil
HDPE GEOMEMBRANE. FUSION WELDING AND EXTRUSION WELDING,
VACUUM TESTING, AIR PRESSURE TESTING, AND DESTRUCTIVE SEAM TESTING DONE
ON LINER BY TAYLOR CONST. AND PLACE 1002 GEOTEXTILE OVER LINER. ONE
FT. OF IDOH #53 STONE WAS PLACED OVER PAD AND PRE-FABRICATED
HDPE SUMP.

Was accepted/inspected on 10/27/93 by SCOTT WEISHAAR.

Accordingly, _____ certifies all work is completed, with the exception of items listed in attached "punch list", in accordance with the project design documents, and all applicable inspections and construction tests have been satisfactorily completed.



Scott A. Weishaar
Remedial CQC Manager

12/02/93

(Date)



Saverio F. DeBartolo
Remedial Contractor Project Manager

1/25/94

(Date)

FINAL CERTIFICATION OF COMPLETION REPORT

**ECC SITE
ZIONSVILLE, INDIANA
PROJECT NUMBER 2396**

Definable Feature of Work:

DIVERSION CHANNELS
- TECHNICAL SPECIFICATION SECT. 2175, 2700, 2710
- DRAWING C-2, C-6, C-8

Including major equipment, material, and/or services:

TRACK HOE EXCAVATOR
DUE TO AN EXCESSIVE AMOUNT OF DEBRIS IN THE DITCH LOCATIONS, THE
PROFILE ON DRAWING C-8 WAS UNOBTAINABLE. THE ELEVATIONS SHOWN ON
DRAWING C-2 WERE MAINTAINED AND CULVERTS INSTALLED AT DESIGNATED
LOCATIONS. RIP RAP WAS INSTALLED ACCORDING TO DRAWING C-2 AND T.S.
2700. HYDRO SEEDING WAS DONE ON THE NORTH DITCH WITH SILT FENCE
INSTALLED AT THE NORTH AND SOUTH T.O.S. IN ACCORDANCE WITH DRAWING
C-2 AND C-7 AND T.S. 2700. STRAW BALETS WERE PLACED 100' APART IN REMAINING DITCHES.

Was accepted/inspected on 12/01/93 by Scott Weishaar

Accordingly, Scott Weishaar certifies all work is completed, with the exception of items listed in attached "punch list", in accordance with the project design documents, and all applicable inspections and construction tests have been satisfactorily completed.

Scott A. Weishaar
Scott A. Weishaar
Remedial CQC Manager

12/02/93
(Date)

Saverio F. DeBartolo
Saverio F. DeBartolo
Remedial Contractor Project Manager

1/25/94
(Date)



CALCULATION WORKSHEET

CLIENT	FILE NO	BY		
<u>ESQUIROCHEM</u>	<u>2396</u>	<u>SCOTT WEISHAAR</u>	<u>1</u>	<u>1</u>
SUBJECT		CHECKED BY		
<u>FINAL CERT.</u>	<u>PUNCH LIST</u>			<u>11/30/93</u>

DIVERSION CHANNELS

1. DUE TO EXCESSIVE AMOUNT OF DEBRIS IN THE DITCH LOCATIONS, THE PROFILE ON DRAWING C-8 WAS UNOBTAINABLE.

PROJECT RECORD

FINAL CERTIFICATION OF COMPLETION REPORT

**ECC SITE
ZIONSVILLE, INDIANA
PROJECT NUMBER 2396**

Definable Feature of Work:

FENCING
- TECHNICAL SPECIFICATION SECT. 2800
- DRAWING C-2, C-7
* SITE SECURITY FENCE, EXCLUSION ZONE FENCE, TEMPORARY CONST FENCE

Including major equipment, material, and/or services:

ROCK DRILL DRILL RIG.
A HIGH VISUAL TEMPORARY CONSTRUCTION FENCE WAS PLACED AROUND THE EXTERIOR PERIMETER OF THE SZ. UPON COMPLETION OF A PERMANENT CHAIN LINK SITE SECURITY FENCE WITH LATCHES AND LOCKS, THE TEMPORARY CONSTRUCTION FENCE WAS REMOVED. A PORTABLE EXCLUSION ZONE FENCE WAS PLACED ONSITE UNTIL COMPLETION OF THE PROJECT TO SECURE THE SZ/LEZ BOUNDARY. THE SITE SECURITY FENCE WAS RELOCATED FROM ITS ORIGINAL PLACEMENT ON DRAWING C-2.

Was accepted/inspected on 12/01/93 by SCOTT WEISHAAR.

Accordingly, _____ certifies all work is completed, with the exception of items listed in attached "punch list", in accordance with the project design documents, and all applicable inspections and construction tests have been satisfactorily completed.

Scott A. Weishaar
Scott A. Weishaar
Remedial CQC Manager

12/02/93
(Date)

Saverio F. DeBartolo
Saverio F. DeBartolo
Remedial Contractor Project Manager

1/25/94
(Date)

PROJECT RECORD

DAILY QUALITY CONTROL REPORT
PAGE 1 OF 2

ECC SITE
ZIONSVILLE, INDIANA
PROJECT NUMBER 2396

Date: 08/30/93

Weather: HOT, HUMID, 95°F VERY DUSTY

Work Performed: HEALTH & SAFETY MEETING WITH ALL
ONSITE PERSONNEL. SITE SURVEY BEING DONE BY
M&E CORP. AWD DOING TANK RELOCATION. TANKS
ARE BEING MOVED WITH TRACK LOADER TO
AREA BY PROCESS BUILDING.

PROJECT RECORD

DAILY QUALITY CONTROL REPORT
PAGE 2 OF 2

Date: 08/30/93

Material/Equipment Delivered (Identify Supplier and Quantity):

936 TRACK LOADER - RESCO RENTALS - PENTANE & REGULATOR - DONLEY
PPE - ARAMSCO

Results of Inspections (See Attached Inspection Report): LEL/O₂ WAS USED TO
INSPECT TANKS BEFORE RELOCATION. ALL ~~RE~~ WERE NEGATIVE.
JEFF CHAPMAN INSPECTED TRACK LOADER. EVERYTHING IS OK

Results of Testing (See Attached Testing Report): AIR MONITORING OF
TANKS GAVE NO INDICATIONS OF CONTAMINANTS.

Verbal Instructions and/or Comments: NA

PROJECT RECORD

Remarks (Including Deficiencies/Corrective Actions): NA

CERTIFICATION: I certify that the above report is complete and correct and that I, or my authorized representative, have inspected all work performed this day by the prime contractor and each subcontractor and have determined that all materials, equipment, and workmanship are in strict compliance with the plans and specifications except as may be noted above.

Scott Weishaar
Signature

08/30/93
Date

- Distribution: 1. Resident Superintendent
2. Independent CQA Officer

DAILY QUALITY CONTROL REPORT
PAGE 1 OF 2

ECC SITE
ZIONSVILLE, INDIANA
PROJECT NUMBER 2396

Date: 08/31/93

Weather: 85 HUMID - RAINY IN AFTERNOON

Work Performed: THE DAY STARTED WITH A VISUAL SURVEY
OF THE PROCESS BLDG BY S. WEISHAR, J. CHAPMAN AND
TIM HARRISON OF CHEM HILL TO DECIDE SAMPLE LOCATIONS.
FOLLOWING THIS J. CHAPMAN USED THE TRACE LOADER TO DO
SOME SITE GRADING FOR MSE TO CONTINUE SITE SURVEY IN
OLD TANK AREA. IN AFTERNOON, T. CASTOR AND I
DID POUROUS MATERIAL SAMPLING IN PROCESS BLDG. TIM
HARRISON OF CHEM HILL WAS ALSO PRESENT TO INSPECT.
UPON COMPLETION OF SAMPLING, WORK ONSITE ENDED

PROJECT RECORD

DAILY QUALITY CONTROL REPORT
PAGE 2 OF 2

Date: 08/31/97

Material/Equipment Delivered (Identify Supplier and Quantity):

8x24 OFFICE TRAILER BY GE MODULE

Results of Inspections (See Attached Inspection Report): VISUAL INSPECTION OF

PROCESS BLDG SHOWED 4 POROUS MATERIALS NEEDING SAMPLED

Results of Testing (See Attached Testing Report): AIR MONITORING WHILE INSIDE

PROCESS BLDG GAUGE NO READINGS OF HAZARD.

Verbal Instructions and/or Comments: CLEARED PATHWAYS IN EXCLUSION

ZONE FOR WALKING. NO OPS. ALLOWED OFF THOSE

PATHWAYS.

Remarks (Including Deficiencies/Corrective Actions): SITE DEBRIS IN

EXCLUSION ZONE IS POSSIBLY UNSEEABLE IN PRESENT

CONDITIONS.

PROJECT RECORD

CERTIFICATION: I certify that the above report is complete and correct and that I, or my authorized representative, have inspected all work performed this day by the prime contractor and each subcontractor and have determined that all materials, equipment, and workmanship are in strict compliance with the plans and specifications except as may be noted above.

Scott Weishaar
Signature

08/31/97
Date

- Distribution: 1. Resident Superintendent
2. Independent CQA Officer

DAILY QUALITY CONTROL REPORT
PAGE 1 OF 2

ECC SITE
ZIONSVILLE, INDIANA
PROJECT NUMBER 2396

Date: 09/01/00

Weather: LOW 80's CLOUDY, BREEZY

Work Performed: PREPARED SUPPORT FACILITY TRAILER.
J. CHAPMAN AND TONY CASTOR SET UP DECON
AREA FOR PERSONNEL IN EXCLUSION ZONE.
J. FIFE AND I HAVE BEEN DOING REPORTS AND
MOBILIZATION ACTIVITIES.

PROJECT RECORD

DAILY QUALITY CONTROL REPORT
PAGE 2 OF 2

Date: 9/1/93

Material/Equipment Delivered (Identify Supplier and Quantity):

~~SNW~~ ^{SNW} ORANGE EXCLUSION FENCING - AWD

Results of Inspections (See Attached Inspection Report): ~~89-~~ FENCING IN
GOOD CONDITION

Results of Testing (See Attached Testing Report): - NA -

PROJECT RECORD

Verbal Instructions and/or Comments: PURCHASED LOCKS AND CHAINS
TO SECURE EXCLUSION ZONE

Remarks (Including Deficiencies/Corrective Actions): STILL AWAITING
CONFIRMATION OF WHICH PLANS ARE TO BE USED.

CERTIFICATION: I certify that the above report is complete and correct and that I, or my authorized representative, have inspected all work performed this day by the prime contractor and each subcontractor and have determined that all materials, equipment, and workmanship are in strict compliance with the plans and specifications except as may be noted above.

Signature Scott W. Shaver

Date 9/1/93

- Distribution:
1. Resident Superintendent
 2. Independent CQA Officer

DAILY QUALITY CONTROL REPORT
PAGE 1 OF 2

ECC SITE
ZIONSVILLE, INDIANA
PROJECT NUMBER 2396

Date: 9/2/43

Weather: WINDY 85° HUMID

Work Performed: STARTED PACKING OUT A-FRAME FIRST
FLOOR WHEN CONFRONTED WITH DRUM FULL OF UNKNOWN
CONTENT. DUE TO THIS, OPERATION WAS STOPPED
FOLLOWING WAS A LONG DISCUSSION ABOUT HOW
TO HANDLE DRUM. AN SCBA AND SARANEX WILL BE
WORN TO DO WORK TOMORROW.

IN AFTERNOON A VISUAL SURVEY WAS DONE ON THE
UPPER FLOOR OF THE A-FRAME.

J. CHAPMAN THEN TOOK TRACK LOADER OUT OF
EZ TO CLEAR AND GRUB AROUND OUTSIDE
OF FENCE AROUND EZ.

PROJECT RECORD

DAILY QUALITY CONTROL REPORT
PAGE 2 OF 2

Date: 09/02/93

Material/Equipment Delivered (Identify Supplier and Quantity):

LABOR, HARNESS, ROPE - AWD (TYPE)
JACKS TOOL RENTAL CLEANED PORT-O-LET

Results of Inspections (See Attached Inspection Report): ALL EQPT IN
GOOD CONDITION.

Results of Testing (See Attached Testing Report): AIR MONITORING IN
A-FRAME GAVE 0 READINGS ON OUM

PROJECT RECORD

Verbal Instructions and/or Comments: NO WORK IS ALLOWED IN
A-FRAME UNTIL DRUM CONTENT IS FOUND OUT.

Remarks (Including Deficiencies/Corrective Actions): SCRA + SARNER WILL BE
USED TEMPORARILY FOR A-FRAME. DRUM MUST BE OVERRICKED.

CERTIFICATION: I certify that the above report is complete and correct and that I, or my authorized representative, have inspected all work performed this day by the prime contractor and each subcontractor and have determined that all materials, equipment, and workmanship are in strict compliance with the plans and specifications except as may be noted above.

Scott Weishaar
Signature

9/02/93
Date

- Distribution:
1. Resident Superintendent
 2. Independent CQA Officer

DAILY QUALITY CONTROL REPORT
PAGE 1 OF 2

ECC SITE
ZIONSVILLE, INDIANA
PROJECT NUMBER 2396

Date: 9/3/93

Weather: RAINY - 78° BREEZY

Work Performed: T. CASTOR ASSISTED SURVEYORS
WITH STAKING FENCE BOUNDARY. FOLLOWING THIS
J. CHADMAN AND I WENT TO GET AIR FOR SCBA's.
T. CASTOR AND I DRESSED LEVEL B TO OVER-FACE
DRUM WITH UNKNOWN CONTENT IN WEST ROOM OF
A-FRAME BLDG.

PROJECT RECORD

DAILY QUALITY CONTROL REPORT
PAGE 2 OF 2

Date: 9/3/93

Material/Equipment Delivered (Identify Supplier and Quantity):

BOTTLED WATER - HOOSIER WATER

AWD BROUGHT IN SCBAS

Results of Inspections (See Attached Inspection Report): SCBAS IN GOOD

WORKING CONDITION

Results of Testing (See Attached Testing Report): AIR MONITORING PERFORMED

ON UNKNOWN CONTENT OF DRUM GAVE ZERO READING.

MINIRAM ALSO GAVE NEGLIGIBLE READING (0.2).

Verbal Instructions and/or Comments: LEVEL B PPE WORN DURING

OVERPACKING OF DRUM

PROJECT RECORD

Remarks (Including Deficiencies/Corrective Actions): SITE IS IN BAD

PHYSICAL SHAPE DUE TO WEATHER.

CERTIFICATION: I certify that the above report is complete and correct and that I, or my authorized representative, have inspected all work performed this day by the prime contractor and each subcontractor and have determined that all materials, equipment, and workmanship are in strict compliance with the plans and specifications except as may be noted above.

Scott Weishaar
Signature

09/03/93
Date

- Distribution: 1. Resident Superintendent
2. Independent CQA Officer

DAILY QUALITY CONTROL REPORT
PAGE 1 OF 2

ECC SITE
ZIONSVILLE, INDIANA
PROJECT NUMBER 2396

Date: 9/8/93

Weather: 70's Cool BREEZY - CLEAR SKY

Work Performed: FINISHED OVERPACKING DRUM IN
A-FRAME BLDG. THEN PROCEEDED TO PROCESS BLDG.
TO COMPLETE SAMPLING. AFTER SENDING OFF
SAMPLES, T. CASTOR AND R. LOGGARD CONTINUED
PACKING OUT REMAINING CONTENTS IN A-FRAME
WHILE J. CHAPMAN GRADED AREA FOR DECON PAD.
A CONST. SECURITY FENCE WAS PLACED AROUND
THE DECON AREA FOLLOWING GRADING.

PROJECT RECORD

DAILY QUALITY CONTROL REPORT
PAGE 2 OF 2

Date: 9/7/93

Material/Equipment Delivered (Identify Supplier and Quantity):

LAB EQPT FROM HERITAGE.

Results of Inspections (See Attached Inspection Report):

Results of Testing (See Attached Testing Report): AIR MONITORING SHOWS

NO SIGN OF CONTAMINANTS IN SOIL BEING GRADED

Verbal Instructions and/or Comments: NA

PROJECT RECORD

Remarks (Including Deficiencies/Corrective Actions): NA

CERTIFICATION: I certify that the above report is complete and correct and that I, or my authorized representative, have inspected all work performed this day by the prime contractor and each subcontractor and have determined that all materials, equipment, and workmanship are in strict compliance with the plans and specifications except as may be noted above.

Edith W. [Signature]
Signature

9/7/93
Date

- Distribution: 1. Resident Superintendent
2. Independent CQA Officer

DAILY QUALITY CONTROL REPORT
PAGE 1 OF 2

ECC SITE
ZIONSVILLE, INDIANA
PROJECT NUMBER 2396

Date: 9/8/93

Weather: Cool 70's Breezy PARTLY CLOUDY

Work Performed: T. CASTOR AND R. LOGELAND FINISHED
PACKING OUT A-FRAME WHILE J. CHAPMAN CONTINUED
GRADING DEBRON PAD AREA.
FOLLOWING THE A-FRAME, CASTOR AND
LOGELAND ATTEMPTED TO SET FENCE POSTS FOR
CONST. BOUNDARY.

PROJECT RECORD

DAILY QUALITY CONTROL REPORT
PAGE 2 OF 2

Date: ~~9/8/93~~ 9/8/93

Material/Equipment Delivered (Identify Supplier and Quantity):

NA

Results of Inspections (See Attached Inspection Report): LOADER HAD HYDRAULIC LEAK. MECHANIC FROM RESEO RENTALS CAME TO REPLACE HOSE.

Results of Testing (See Attached Testing Report): AIR MONITORING SHOWED NO SIGNS OF CONTAMINANTS WHILE DRIVING POSTS OF GRADING DECON AREA.

PROJECT RECORD

Verbal Instructions and/or Comments: GROUND TOO HARD TO SET POSTS. TRY AN AIR HAMMER TOMORROW

Remarks (Including Deficiencies/Corrective Actions): ~~PHONE~~ PHONE DID NOT WORK AT ALL TODAY

CERTIFICATION: I certify that the above report is complete and correct and that I, or my authorized representative, have inspected all work performed this day by the prime contractor and each subcontractor and have determined that all materials, equipment, and workmanship are in strict compliance with the plans and specifications except as may be noted above.

Signature Scott W. [Signature]

Date 9/8/93

- Distribution:
1. Resident Superintendent
 2. Independent CQA Officer

DAILY QUALITY CONTROL REPORT
PAGE 1 OF 2

ECC SITE
ZIONSVILLE, INDIANA
PROJECT NUMBER 2396

Date: 9/09/93

Weather: SUNNY, Cool ~ 75° WINDY

Work Performed: SET OUTSIDE BOUNDARY FENCE AND POSTS
ALONG WEST SIDE OF PROJECT. JEFF CHARMAN
COMPLETED GRADING OF DECON AREA AND PROCEEDED
TO LAYDOWN AREA AND SUPPORT ZONE TO GRADE AND
CLEAR DEBRIS. T. CASTOR DID INVENTORY ON
REMAINING CHEMICALS IN A-FRAME.

PROJECT RECORD

DAILY QUALITY CONTROL REPORT
PAGE 2 OF 2

Date: 9/9/93

Material/Equipment Delivered (Identify Supplier and Quantity):

AWD BROUGHT COMPRESSOR AND ROCK DRILL ON SITE

Results of Inspections (See Attached Inspection Report): BAD HOSE ON COMPRESSOR

HAD TO REPLACE

Results of Testing (See Attached Testing Report): - NA -

PROJECT RECORD

Verbal Instructions and/or Comments: GROUND VERY HARD. FOUND

BRAIN LINE IN SUPPORT ZONE THAT WAS FULL OF

LIQUID.

Remarks (Including Deficiencies/Corrective Actions): BAD HOSE ON COMPRESSOR

HAD TO REPLACE.

CERTIFICATION: I certify that the above report is complete and correct and that I, or my authorized representative, have inspected all work performed this day by the prime contractor and each subcontractor and have determined that all materials, equipment, and workmanship are in strict compliance with the plans and specifications except as may be noted above.

Signature Scott Weisheit

Date 9/9/93

- Distribution: 1. Resident Superintendent
2. Independent CQA Officer

DAILY QUALITY CONTROL REPORT
PAGE 1 OF 2

ECC SITE
ZIONSVILLE, INDIANA
PROJECT NUMBER 2396

Date: 9/10/93

Weather: SUNNY WINDY 75"

Work Performed: FINISHED CONSTRUCTION OF FENCE.
JEFF GRADED SUPPORT ZONE AND ASSISTED TONY
CASTOR AND RICH LOGECAND IN RELOCATING DRUMS
FROM A-FRAME. LAB PACKED REMAINING
CHEMICALS IN A-FRAME. PLACED "DANGER"
TAPE AROUND SITE.

PROJECT RECORD

DAILY QUALITY CONTROL REPORT
PAGE 2 OF 2

Date: 9/10/93

Material/Equipment Delivered (Identify Supplier and Quantity):

D4 DOZER - BT TRUCKING ON BEHALF OF MACALLISTER
EQPT.

Results of Inspections (See Attached Inspection Report): RICH LOGELAND INSPECTED
EQPT. IN GOOD CONDITION - NO LEAKS

Results of Testing (See Attached Testing Report): -NA-

PROJECT RECORD

Verbal Instructions and/or Comments: -NA-

Remarks (Including Deficiencies/Corrective Actions): ALL THREE HOSES
BLEW ON COMPRESSOR TO ROCK DRILL / FINISHED
TASK WITH POST SETTER

CERTIFICATION: I certify that the above report is complete and correct and that I, or my authorized representative, have inspected all work performed this day by the prime contractor and each subcontractor and have determined that all materials, equipment, and workmanship are in strict compliance with the plans and specifications except as may be noted above.

Scott Wetzhaar
Signature

9/10/93
Date

- Distribution: 1. Resident Superintendent
2. Independent CQA Officer

DAILY QUALITY CONTROL REPORT
PAGE 1 OF 2

ECC SITE
ZIONSVILLE, INDIANA
PROJECT NUMBER 2396

Date: 09/13/93

Weather: PARTLY CLOUDY - HIGH 70'S WINDY
MUDDY

Work Performed: R. LOGGAND USED DOZER TO GRADE
SUPPORT ZONE AND DECON PAD. J. CHAPMAN
USED TRACK LOADER TO CLEAR SUPPORT ZONE AND
RELOCATE TANKS INTO REMEDIAC ZONE. WHEN
GEOTEXTILE ARRIVED, ALL CREW INCLUDING ME,
ASSISTED IN UNLOADING. AFTER COMPLETING UNLOAD,
RICH AND JEFF WENT BACK TO DECON AREA
TO CONTINUE GRADING. T. CASTOR AND I SET STAKES
ALONG REMEDIAC BOUNDARY AND RAN "DANGER"
TAPE ALONG BOUNDARY. TONY THEN PROCEEDED TO
COVER GEOTEXTILE ROCKS WITH POLY SHEETING.

PROJECT RECORD

DAILY QUALITY CONTROL REPORT
PAGE 2 OF 2

Date: 9/18/93

Material/Equipment Delivered (Identify Supplier and Quantity):

GEOTEXTILE - Brock TRUCKING LEXINGTON, KY LOC 257 172

Results of Inspections (See Attached Inspection Report): INSPECTION OF

GEOTEXTILE - ALL ROLLS 31000

Results of Testing (See Attached Testing Report): AIR MONITOR ALL TANKS -

LEL/O₂ - NO SIGNS OF EXPLOSION POTENTIAL

Verbal Instructions and/or Comments:

PROJECT RECORD

Remarks (Including Deficiencies/Corrective Actions):

CERTIFICATION: I certify that the above report is complete and correct and that I, or my authorized representative, have inspected all work performed this day by the prime contractor and each subcontractor and have determined that all materials, equipment, and workmanship are in strict compliance with the plans and specifications except as may be noted above.

Scott Weidman
Signature

9/18/93
Date

- Distribution: 1. Resident Superintendent
2. Independent CQA Officer

DAILY QUALITY CONTROL REPORT
PAGE 1 OF 2

ECC SITE
ZIONSVILLE, INDIANA
PROJECT NUMBER 2356

Date: 09/14/93

Weather: CLOUDY VERY WINDY HIGH 70'S

Work Performed: JEFF CHAPMAN AND RICH LORELAND SPENT
MAJORITY OF DAY GRADING SUPPORT ZONE.
RICH AND TONY CASTOR MOVED REMAINING DRUMS
INTO REMEDIAL ZONE. TONY AND I WENT INTO
PROCESS BLDG. TO SAMPLE BOILER PLATE SEAL AND
SIDE WALL INSULATION. FOLLOWING LUNCH, RICH AND
JEFF CONTINUED GRADING. TONY AND I SET
GRADE STAKES ALONG NORTH WEST BY ACCESS
ROAD. ALSO MARKED GRADES ON DECON PAD
CORNERS. TONY AND I SET FENCE TO
NORTHWEST CORNER.

PROJECT RECORD

DAILY QUALITY CONTROL REPORT
PAGE 2 OF 2

Date: 9/14/93

Material/Equipment Delivered (Identify Supplier and Quantity):

HOOSIER WATER - 1 BOTTLE WATER

TAYLOR OIL CO. - 138 GAL.

Results of Inspections (See Attached Inspection Report): _____

Results of Testing (See Attached Testing Report): USE OF MINIRAM WHILE

SAMPLING BOILER

Verbal Instructions and/or Comments: _____

Remarks (Including Deficiencies/Corrective Actions): _____

PROJECT RECORD

CERTIFICATION: I certify that the above report is complete and correct and that I, or my authorized representative, have inspected all work performed this day by the prime contractor and each subcontractor and have determined that all materials, equipment, and workmanship are in strict compliance with the plans and specifications except as may be noted above.

Scott Wilson
Signature

9/14/93
Date

- Distribution: 1. Resident Superintendent
2. Independent CQA Officer

DAILY QUALITY CONTROL REPORT
PAGE 1 OF 2

ECC SITE
ZIONSVILLE, INDIANA
PROJECT NUMBER 2396

Date: 9/15/93

Weather: COLD - 60 WINDY OVERCAST

Work Performed: SITE WALK - THEN SENT CREW HOME.
FIFE AND I CHECKED GRADE STAKES. LEFT
SITE TO DO FACILITY PAPERWORK AND EQUIP
PURCHASE.

PROJECT RECORD

DAILY QUALITY CONTROL REPORT
PAGE 2 OF 2

Date: 9/15/93

Material/Equipment Delivered (Identify Supplier and Quantity):

- NA -

Results of Inspections (See Attached Inspection Report):

- NA -

Results of Testing (See Attached Testing Report):

- NA -

PROJECT RECORD

Verbal Instructions and/or Comments:

NO FIELD OPS
DUE TO SITE CONDITIONS

Remarks (Including Deficiencies/Corrective Actions):

CERTIFICATION: I certify that the above report is complete and correct and that I, or my authorized representative, have inspected all work performed this day by the prime contractor and each subcontractor and have determined that all materials, equipment, and workmanship are in strict compliance with the plans and specifications except as may be noted above.

Scott Weizman
Signature

9/15/93
Date

- Distribution: 1. Resident Superintendent
2. Independent CQA Officer

DAILY QUALITY CONTROL REPORT
PAGE 1 OF 2

ECC SITE
ZIONSVILLE, INDIANA
PROJECT NUMBER 2396

Date: 9/16/93

Weather: COOL - 70° PARTLY CLOUDY

Work Performed: GRADE SUPPORT ZONE AND
TAKE SAMPLE OF GEOTEXTILE FOR QC TEST.
SENT TO GEO TECHNIQUES IN WASHINGTON, PA.

PROJECT RECORD

DAILY QUALITY CONTROL REPORT
PAGE 2 OF 2

Date: 9/16/93

Material/Equipment Delivered (Identify Supplier and Quantity):

- NA -

Results of Inspections (See Attached Inspection Report): - NA -

Results of Testing (See Attached Testing Report): SENT SAMPLE OF GEOTEXTILE
TO LAB FOR ANALYSIS

Verbal Instructions and/or Comments: LAB IN WASHINGTON, PA.

Remarks (Including Deficiencies/Corrective Actions): _____

PROJECT RECORD

CERTIFICATION: I certify that the above report is complete and correct and that I, or my authorized representative, have inspected all work performed this day by the prime contractor and each subcontractor and have determined that all materials, equipment, and workmanship are in strict compliance with the plans and specifications except as may be noted above.

Scott Weisman
Signature

9/16/93
Date

- Distribution: 1. Resident Superintendent
2. Independent CQA Officer

DAILY QUALITY CONTROL REPORT
PAGE 1 OF 2

ECC SITE
ZIONSVILLE, INDIANA
PROJECT NUMBER 2396

Date: 9/17/93

Weather: cool - 70° ~~partly~~ ^{MOSTLY} SUNNY

Work Performed: CONTINUED GRADING OF SUPPORT ZONE

PROJECT RECORD

DAILY QUALITY CONTROL REPORT
PAGE 2 OF 2

Date: 9/17/93

Material/Equipment Delivered (Identify Supplier and Quantity):

2-20' OSHA APPROVED LINK CHAINS, 2-22" SPUD BARS, SHARP SHOOTER
SPADE, TRACK CLEANER/SCRAPER - AGGREGATE SUPPLY

Results of Inspections (See Attached Inspection Report): Good

Results of Testing (See Attached Testing Report): -NA-

PROJECT RECORD

Verbal Instructions and/or Comments: ~~---~~ CLEAN TRACKS ON

DOZER AND LOADER

Remarks (Including Deficiencies/Corrective Actions): _____

CERTIFICATION: I certify that the above report is complete and correct and that I, or my authorized representative, have inspected all work performed this day by the prime contractor and each subcontractor and have determined that all materials, equipment, and workmanship are in strict compliance with the plans and specifications except as may be noted above.

E.A. [Signature]
Signature

9/17/93
Date

- Distribution: 1. Resident Superintendent
2. Independent CQA Officer

DAILY QUALITY CONTROL REPORT
PAGE 1 OF 2

ECC SITE
ZIONSVILLE, INDIANA
PROJECT NUMBER 2396

Date: 9/20/93

Weather: CLOUDY Low 70s BREEZY

Work Performed: DESTRUCTED A-FRAME AND GRADED AREA
WHERE IT STOOD. FOLLOWING THIS, JEFF ATTEMPTED
TO GRADE LAYDOWN AREA NEAR EXISTING SWAGE.
IT WAS TOO SOFT TO WORK, AND GOT THE LOADER
STUCK. AFTER GETTING IT UNSTUCK, JEFF SWITCHED
TO THE DOZER TO GRADE THE SUPPORT ZONE SOME
MORE.

PROJECT RECORD

DAILY QUALITY CONTROL REPORT
PAGE 2 OF 2

Date: 9/20/95

Material/Equipment Delivered (Identify Supplier and Quantity):

TAYLOR OIL - DIESEL FUEL AND 6 GALS. OF 15W40
OIL

Results of Inspections (See Attached Inspection Report): GOOD

Results of Testing (See Attached Testing Report): Air MONITORING GOOD

Verbal Instructions and/or Comments: - NA -

PROJECT RECORD

Remarks (Including Deficiencies/Corrective Actions): ~~NA~~ - NA -

CERTIFICATION: I certify that the above report is complete and correct and that I, or my authorized representative, have inspected all work performed this day by the prime contractor and each subcontractor and have determined that all materials, equipment, and workmanship are in strict compliance with the plans and specifications except as may be noted above.


Signature

9/20/95
Date

- Distribution:
1. Resident Superintendent
 2. Independent CQA Officer

DAILY QUALITY CONTROL REPORT
PAGE 1 OF 2

ECC SITE
ZIONSVILLE, INDIANA
PROJECT NUMBER 2396

Date: 9/21/93

Weather: OVERCAST LOW 70's

Work Performed: SMOIC BEGAN CONSTRUCTION OF DECON
PAD. AWD BEGAN DIGGING TRENCH ON WEST SIDE OF
SUPPORT FACILITY. THE CREW AND I DID GRADE
SURVEY ON SUPPORT FACILITY FROM CROWN - NORTH.

PROJECT RECORD

DAILY QUALITY CONTROL REPORT
PAGE 2 OF 2

Date: 9/21/93

Material/Equipment Delivered (Identify Supplier and Quantity):

SMOCC BROUGHT EQPT ON SITE

Results of Inspections (See Attached Inspection Report): -NA-

Results of Testing (See Attached Testing Report): T. CASTOR MONITORED

SMOCC AS THEY BEGAN WORK ON DECON PAD.

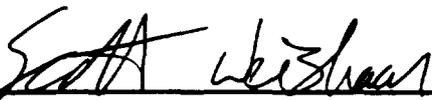
PROJECT RECORD

Verbal Instructions and/or Comments: -NA-

Remarks (Including Deficiencies/Corrective Actions): TIME SPENT ON

SITE GRADING HAS BEEN EXCESSIVE BEYOND TIME
NECESSARY.

CERTIFICATION: I certify that the above report is complete and correct and that I, or my authorized representative, have inspected all work performed this day by the prime contractor and each subcontractor and have determined that all materials, equipment, and workmanship are in strict compliance with the plans and specifications except as may be noted above.


Signature

9/21/93
Date

- Distribution:
1. Resident Superintendent
 2. Independent CQA Officer

DAILY QUALITY CONTROL REPORT
PAGE 1 OF 2

ECC SITE
ZIONSVILLE, INDIANA
PROJECT NUMBER 2396

Date: 9/28/97

Weather: BREEZY, OVERCAST, LOW 70'S

Work Performed: RICH GRADED SUPPORT ZONE FROM
CROWN TO NORTH. JEFF GRADED ALONG WEST BOUNDARY.
AFTER LUNCH, WE LAYED GEOTEXTILE AND
SPREAD #53 STONE ONTOP OF IT. TONY DID
AIR MONITORING AROUND SMOCK WHILE THEY CONTINUED
DIGGING THEIR FOOTERS.

PROJECT RECORD

DAILY QUALITY CONTROL REPORT
PAGE 2 OF 2

Date: 9/22/93

Material/Equipment Delivered (Identify Supplier and Quantity):

MARTIN Macrieth USED NEAL INC AND MORRIS-SOUTHARD
TO DELIVER # ~~2~~ STONE

Results of Inspections (See Attached Inspection Report): STONE IS TO SPEC.

ALL STONE IS GOOD SIZE. ~~XXXXX~~ ~~XXXXXXXXXX~~

Results of Testing (See Attached Testing Report): ~~SEE~~ ATTACHED IS

GEOTEXTILE LAB RESULTS AND SUBMITTAL

Verbal Instructions and/or Comments: SLOPE WAS CHECKED FROM

CROWN TO SOUTH AND WAS AT 2%

Remarks (Including Deficiencies/Corrective Actions):

PROJECT RECORD

CERTIFICATION: I certify that the above report is complete and correct and that I, or my authorized representative, have inspected all work performed this day by the prime contractor and each subcontractor and have determined that all materials, equipment, and workmanship are in strict compliance with the plans and specifications except as may be noted above.

Scott Weisheit
Signature

9/22/93
Date

- Distribution: 1. Resident Superintendent
2. Independent CQA Officer

CRITICAL
ACTIVITY

SUBMITTAL FORM
PAGE 1 OF 1

BCC SITE
ZIONSVILLE, INDIANA
PROJECT NUMBER 2376

Date of Submittal: 09/22/93 Submittal Number SPMR-018-2
Approval or Disapproval By: 09/22/93
Previous Submittal Dates: _____ Resubmittal Number -A
_____ Resubmittal Number -B
_____ Resubmittal Number -C
_____ Resubmittal Number -D

Title of Submittal: GEOTECHNICAL LABORATORY REPORT (GEOTEKSTILE CONFORMANCE TEST RESULTS)
Manufacturer: _____
Address: _____

Supplier: GEOTECHNICS, INC.
Address: 801 EAST MALOMA STREET
WASHINGTON, PA 15301

Specification Reference Number: SECTION 01410-TESTING LABORATORY SERVICES
Specification Reference Paragraph: 1.03.C.2
Specification Reference Drawing Number: N/A

Comments (additional space on back of this sheet)
(SEE ATTACHED)

Deviations (additional space on back of this sheet)

Certification Statement
By this submittal, I hereby represent that I have determined and verified all field measurements, field construction criteria, materials, dimensions, catalog numbers, and similar data and I have checked and coordinated each item with other applicable reviewed shop drawings and all contract requirements.

James M. Ambrose
AWD Technologies, Inc.
Authorized Representative

Items Included	Check with "X"
Plan/Narrative	
Shop Drawing(s)	
Catalog Cut/Mfg Data	
Technical Data	
Test Report	X
Certification	
Specifications	
Other:	

CC: Bob Autio, REM

SCOTT WEISHAAR, CRC MANAGER, AWD
FILE

PROJECT RECORD

9/22/93

GEO TECHNICAL LABORATORY REPORT

ENVIRO-CHEM SUPERFUND SITE
AND PROJECT # 2396

GEO TEXTILE SAMPLE TAKEN BY MR. SCOTT ^{WEISHAAR}~~WEISBAAR~~
ON THURSDAY, SEPTEMBER 16, 1993 (P.M.).

TESTING PERFORMED IN ACCORDANCE WITH THE TECHNICAL
SPECIFICATIONS (SECTION 02280 - GEOTEXTILES, PARAGRAPH 2.01.C).
ALL CONFORMANCE TEST RESULTS EXCEED THE MINIMUM
VALUES GIVEN IN PARAGRAPH 2.01.C.

GEOTEXTILE TO BE USED UNDER ACCESS ROADS, PARKING AREA,
LAYDOWN AREA, AND OTHER AREAS AS REQUIRED BY THE TECHNICAL
SPECIFICATIONS.

THIS CONFORMANCE TESTING ALSO WAS REQUIRED BY THE
CONSTRUCTION QUALITY ASSURANCE PLAN (CQAP) SECTION 4.4.2.1
AND AWD'S APPROVED CONTRACTOR QUALITY CON. PLAN (CQCP).

PROJECT RECORD



CONFORMANCE TEST RESULTS

CLIENT: AWD
 CLIENT PROJECT: 2386
 PROJECT NO.: L93139-01

MATERIAL: NICOLON S1000
 16 OZ NONWOVEN GEOTEXTILE
 SAMPLE ID.: S-1

TEST	ASTM METHOD	UNITS	SPECIMEN NO.										AVE	STD		
			1	2	3	4	5	6	7	8	9	10				
MASS UNIT AREA	D-3776	oz/sq	18.60	18.86											18.73	0.13
MULLEN BURST	D-3786	psi	790	830	1100	905	950	750	900	900	870	940			893.5	91.7
GRAB STRENGTH	D-4632	MD-lbs	739.5	598.4	598.8	581.5	565.2	514.1	512.1	673.6	717.0	762.4			623.17	85.65
		CD-lbs	718.2	732.0	722.0	743.3	711.6	728.7	658.8	709.0	678.9	737.2			713.97	25.16
GRAB ELONGATION		MD-%	105	90	95	100	100	85	85	90	100	90			94.0	8.6
		CD-%	90	85	85	80	75	85	80	85	80	105			85.0	7.7
TRAP TEAR	D-4533	MD-lbs	174.5	191.0	165.8	184.9	207.0	213.1	170.0	167.9	193.8	207.8			187.56	16.84
		CD-lbs	259.4	234.4	276.2	272.9	254.7	290.7	280.0	224.5	241.6	194.4			252.88	28.02
PUNCTURE	D-4833	lbs	276.3	284.8	287.1	293.1	335.1	304.3	324.1	244.6	228.2	278.8			288.84	26.35
			292.6	279.7	306.8	287.5	310.8									
A.O.S.	D-4751	mm	<0.075	<0.075	<0.075	<0.075	<0.075	<0.075	<0.075	<0.075	<0.075	<0.075			<0.075	
			177.0	210.0	186.0	211.0	204.0								197.60	13.66
ABRASION RESIST.	D-3884															

CHECKED BY: *RFJ* DATE: 9-22-93

rd: TEXTILE.WKZ

PROJECT RECORD

DAILY QUALITY CONTROL REPORT
PAGE 1 OF 2

ECC SITE
ZIONSVILLE, INDIANA
PROJECT NUMBER 2796

Date: 9/23/23

Weather: BREEZY RAIN LOW 60's HUMID

Work Performed: GRADED SUPPORT ZONE, LAYED
GEOTEXTILE LINER AND #2 STONE

PROJECT RECORD

DAILY QUALITY CONTROL REPORT
PAGE 2 OF 2

Date: 9/23/93

Material/Equipment Delivered (Identify Supplier and Quantity):

MARTIN MARIETTA - NEAL INC & SOUTHWEST TRUCKING CO.'S DELIVERED
40 TONS OF #2 STONE

Results of Inspections (See Attached Inspection Report): STONE IS TO SPEC
SIZE.

Results of Testing (See Attached Testing Report): _____

Verbal Instructions and/or Comments: - NA -

PROJECT RECORD

Remarks (Including Deficiencies/Corrective Actions): - NA -

CERTIFICATION: I certify that the above report is complete and correct and that I, or my authorized representative, have inspected all work performed this day by the prime contractor and each subcontractor and have determined that all materials, equipment, and workmanship are in strict compliance with the plans and specifications except as may be noted above.

Scott W. Graham
Signature

9/23/93
Date

- Distribution: 1. Resident Superintendent
2. Independent CQA Officer

DAILY QUALITY CONTROL REPORT
PAGE 1 OF 2

ECC SITE
ZIONSVILLE, INDIANA
PROJECT NUMBER 2396

Date: 9/24/93

Weather: HIGH 30'S PARTLY SUNNY

Work Performed: LAY GEOTEXTILE AND # 2 STONE AND
CONTINUE GRADING SUPPORT ZONE.

PROJECT RECORD

DAILY QUALITY CONTROL REPORT
PAGE 2 OF 2

Date: 9/24/93

Material/Equipment Delivered (Identify Supplier and Quantity):

RESCO RENTS - INGERSOLL RAND DD-65 ROLLER

MARTIN MARRETTA - NEAL & SOUTHWARD TRUCKING CO. 3 #2 STONE

Results of Inspections (See Attached Inspection Report): JEFF CHAPMAN INSPECTED

EQPT CHECKED Good.

STONE TO SPEC.

Results of Testing (See Attached Testing Report): NA -

Verbal Instructions and/or Comments: NA -

PROJECT RECORD

Remarks (Including Deficiencies/Corrective Actions): NA -

CERTIFICATION: I certify that the above report is complete and correct and that I, or my authorized representative, have inspected all work performed this day by the prime contractor and each subcontractor and have determined that all materials, equipment, and workmanship are in strict compliance with the plans and specifications except as may be noted above.

Signature Jeff Chapman

Date 9/24/93

- Distribution:
1. Resident Superintendent
 2. Independent CQA Officer

DAILY QUALITY CONTROL REPORT
PAGE 1 OF 2

ECC SITE
ZIONSVILLE, INDIANA
PROJECT NUMBER 2396

Date: 9/27/53

Weather: COLD - HIGH 50's LOW 60's RAIN
WINDY

Work Performed: CONTINUED GRADING SUPPORT ZONE AND
PLACING # 53 STONE.

SMOKE CONTINUED BUILDING FRAMEWORK FOR DECON
PAD AND THEN EXCAVATED SUMP HOLE.

PROJECT RECORD

DAILY QUALITY CONTROL REPORT
PAGE 2 OF 2

Date: 9/27/93

Material/Equipment Delivered (Identify Supplier and Quantity):

#53 STONE - 20 LOADS

Results of Inspections (See Attached Inspection Report): STONE IS TO SPEC.

COMPACTION IS GOOD FOR WHAT CAN BE DONE

Results of Testing (See Attached Testing Report): AIR MONITORING OF SMOCK

EXCAVATION H/C.

PROJECT RECORD

Verbal Instructions and/or Comments: - NA -

Remarks (Including Deficiencies/Corrective Actions): WEATHER PLAYED

GREAT FACTOR IN NOT COMPACTING ALL STONE TODAY

CERTIFICATION: I certify that the above report is complete and correct and that I, or my authorized representative, have inspected all work performed this day by the prime contractor and each subcontractor and have determined that all materials, equipment, and workmanship are in strict compliance with the plans and specifications except as may be noted above.

Scott W. [Signature]
Signature

9/27/93
Date

- Distribution:
1. Resident Superintendent
 2. Independent CQA Officer

DAILY QUALITY CONTROL REPORT
PAGE 1 OF 2

ECC SITE
ZIONSVILLE, INDIANA
PROJECT NUMBER 2396

Date: 9/20/93

Weather: MID 60'S CLOUDY WINDY

Work Performed: ~~RE~~ EXCAVATED WEST SIDE TRENCH
AFTER CONTINUED GRADING OF SUPPORT ZONE
AND SPREADING #53 STONE.

PROJECT RECORD

DAILY QUALITY CONTROL REPORT
PAGE 2 OF 2

Date: 9/28/93

Material/Equipment Delivered (Identify Supplier and Quantity):

MARIETTA #53 STONE / SMOCK HAD SUMP BOX DELIVERED
PST ENERGY - 2 POWER POLES

Results of Inspections (See Attached Inspection Report): EVERYTHING IS TO
SPEC.

Results of Testing (See Attached Testing Report): _____

PROJECT RECORD

Verbal Instructions and/or Comments: -NA-

Remarks (Including Deficiencies/Corrective Actions): -NA-

CERTIFICATION: I certify that the above report is complete and correct and that I, or my authorized representative, have inspected all work performed this day by the prime contractor and each subcontractor and have determined that all materials, equipment, and workmanship are in strict compliance with the plans and specifications except as may be noted above.

Scott Weishaar
Signature

9/28/93
Date

- Distribution: 1. Resident Superintendent
2. Independent CQA Officer

DAILY QUALITY CONTROL REPORT
PAGE 1 OF 2

ECC SITE
ZIONSVILLE, INDIANA
PROJECT NUMBER 2396

Date: 9/29/97

Weather: HIGH 50'S, WINDY, CLOUDY,

Work Performed: EXCAVATED REMAINDER OF WEST TRENCH TO
CREEK AND THEN EXCAVATE EAST TRENCH ALONG
REMEDIAL BOUNDARY. ALSO HAD RICH GRADE
LAYDOWN AREA. SMOCK COVERED SUMP.

PROJECT RECORD

DAILY QUALITY CONTROL REPORT
PAGE 2 OF 2

Date: 9/29/83

Material/Equipment Delivered (Identify Supplier and Quantity):

SMOCK HAD W2 - W2 WIRE MESH DELIVERED + LOAD OF #4 STEEL

Results of Inspections (See Attached Inspection Report): SMOCK WILL

PRODUCE DOCUMENTATION OF SPEC.

Results of Testing (See Attached Testing Report): AIR MONITORING SITUED

NO SIGNS OF CONTAMINANTS

PROJECT RECORD

Verbal Instructions and/or Comments: - NA -

Remarks (Including Deficiencies/Corrective Actions): EAST TRENCH WAS

FULL OF CONSTRUCTION DEBRIS TO THE POINT GRADE

COULD NOT BE OBTAINED.

CERTIFICATION: I certify that the above report is complete and correct and that I, or my authorized representative, have inspected all work performed this day by the prime contractor and each subcontractor and have determined that all materials, equipment, and workmanship are in strict compliance with the plans and specifications except as may be noted above.


Signature

9/29/83
Date

- Distribution:
1. Resident Superintendent
 2. Independent CQA Officer

DAILY QUALITY CONTROL REPORT
PAGE 1 OF 2

ECC SITE
ZIONSVILLE, INDIANA
PROJECT NUMBER 2396

Date: 9/30/93

Weather: COOL High of 60 SUNNY BREEZY

Work Performed: EXCAVATED TRENCHES ALONG NORTH
EAST AND SOUTH EAST. UPON COMPLETING THAT,
RICH COMPLETED GRADING OF SE SOUTH OF GATE TO
TRENCH INTERSECTION. WE THEN LAYED GEOTEXTILE
AND #2 STONE OVER AREA.

SMOCK CONTINUED BLDG. FORMS FOR CURBS ON DECON
PAD.

PROJECT RECORD

DAILY QUALITY CONTROL REPORT
PAGE 2 OF 2

Date: 9/30/93

Material/Equipment Delivered (Identify Supplier and Quantity):

MARTIN MARIETTA - 7 LOADS OF #2 STONE

GE CAPITAL MODULAR SPACE - 1-60' & 1-40' TRAILER

Results of Inspections (See Attached Inspection Report): STONE IS TO SPEC.

TRAILERS IN GOOD CONDITION

Results of Testing (See Attached Testing Report): AIR MONITORING - NO

SIGNS OF CONTAMINANTS.

PROJECT RECORD

Verbal Instructions and/or Comments: - NA -

Remarks (Including Deficiencies/Corrective Actions): - NA -

CERTIFICATION: I certify that the above report is complete and correct and that I, or my authorized representative, have inspected all work performed this day by the prime contractor and each subcontractor and have determined that all materials, equipment, and workmanship are in strict compliance with the plans and specifications except as may be noted above.

Signature: [Handwritten Signature]

Date: 9/30/93

- Distribution: 1. Resident Superintendent
2. Independent CQA Officer

DAILY QUALITY CONTROL REPORT
PAGE 1 OF 2

ECC SITE
ZIONSVILLE, INDIANA
PROJECT NUMBER 2396

Date: 10/01/93

Weather: WINDY, MID 60'S PARTLY CLOUDY

Work Performed: GRADED AND PLACED #2 STONE ON
LAYDOWN AREA.
SMOKE POURED CURBS OF DECON PAD AND
SET STEPS IN SUMP.

PROJECT RECORD

DAILY QUALITY CONTROL REPORT
PAGE 2 OF 2

Date: 10/01/93

Material/Equipment Delivered (Identify Supplier and Quantity):

RESCO - VIBRATORY ROLLER DMACK - IMI - CONCRETE
MARTIN MARRIETTA - FZSTONE

Results of Inspections (See Attached Inspection Report): CONCRETE - 2B -
S.S BAG, N/A, TYPE III, HEAVY EARLY - IS SPEC

Results of Testing (See Attached Testing Report): SLUMP TESTS GAUGE 3 1/2" AND
2 1/4" AIR TEST WAS 1% TEMP 64°F - TESTING
BY MIDWEST TESTING

Verbal Instructions and/or Comments: - NA -

PROJECT RECORD

Remarks (Including Deficiencies/Corrective Actions): - NA -

CERTIFICATION: I certify that the above report is complete and correct and that I, or my authorized representative, have inspected all work performed this day by the prime contractor and each subcontractor and have determined that all materials, equipment, and workmanship are in strict compliance with the plans and specifications except as may be noted above.

Scott Weishaar
Signature

10/01/93
Date

- Distribution: 1. Resident Superintendent
2. Independent CQA Officer

DAILY QUALITY CONTROL REPORT
PAGE 1 OF 2

ECC SITE
ZIONSVILLE, INDIANA
PROJECT NUMBER 2396

Date: 10/04/93

Weather: BREEZY, MOSTLY SUNNY, HIGH 70s

Work Performed: AWD CONTINUED GRADING LAYDOWN
AREA AND THEN PUT #2 AND #53 STONE IN
AREA. WHILE ROLLING THIS AREA, AWD ALSO BEGAN
WORK ON ACCESS ROAD. THE RD. WAS GRADED,
GEOTEXTILE WAS PLACED, AND #2 STONE WAS PUT
ON AREA.

SMOCK INSTALLED 6IN. DIA. PIPE FROM DECON
PAD TO MANHOLE (FOR SUMP). THEY SPENT THE REMAINDER
OF THE DAY TAKING DOWN THE INSIDE FORM AROUND
THE CURBS.

PROJECT RECORD

DAILY QUALITY CONTROL REPORT
PAGE 2 OF 2

Date: 10/04/93

Material/Equipment Delivered (Identify Supplier and Quantity):

MARTIN MARIETTA - #530 STONE AND #2 STONE AND #8 STONE
SMOCK HAD #4 STONE DELIVERED AND ALSO AC CAP STRIPS
EXPANSION JOINTS.

Results of Inspections (See Attached Inspection Report): STONE IS TO SPEC. FOR

ALL #53, #2, #4, & #8

Results of Testing (See Attached Testing Report):

~~RESIN~~ ~~TEST~~

Verbal Instructions and/or Comments:

SMOCK WILL HAVE TO USE A
COHESIVE RESIN ON EAST CURB OF DECON PAD DUE
TO SOME MINOR CHIPPING ON THE KEY WAY.

Remarks (Including Deficiencies/Corrective Actions):

PROJECT RECORD

CERTIFICATION: I certify that the above report is complete and correct and that I, or my authorized representative, have inspected all work performed this day by the prime contractor and each subcontractor and have determined that all materials, equipment, and workmanship are in strict compliance with the plans and specifications except as may be noted above.

Signature

Scott Weisman

Date

10/04/93

- Distribution: 1. Resident Superintendent
2. Independent CQA Officer

DAILY QUALITY CONTROL REPORT
PAGE 1 OF 2

ECC SITE
ZIONSVILLE, INDIANA
PROJECT NUMBER 2396

Date: 10/05/93

Weather: CLEAR, SUNNY, BREEZ, LOW 70s

Work Performed: CONTINUED GRADING ACCESS ROAD AND
PARKING AREA. COMPLETED LAYING GEOTEXTILE
IN PARKING AREA AND CONTINUE PUTTING #2 STONE
DOWN. ALSO PUT #53 ON AREA WHERE DECON
TRAILER WILL BE AND BEGIN ON ACCESS ROAD.

PROJECT RECORD

DAILY QUALITY CONTROL REPORT
PAGE 2 OF 2

Date: 10/5/93

Material/Equipment Delivered (Identify Supplier and Quantity):

MARTIN MARIETTA - #2 AND #5'S STONE - IDOH SPEC.
INDEPENDENT CONCRETE PIPE 12", 18" & 30" PIPE, RESCO - TRACK HUE

Results of Inspections (See Attached Inspection Report): STONE IS TO SPEC.
AWAITING CERT ON PIPE.

EAST CURB KEYWAY IS REPAIRED AND LOOKS ACCEPTABLE

Results of Testing (See Attached Testing Report): _____

PROJECT RECORD

Verbal Instructions and/or Comments: SMUCK REPAIRED EAST
CURB KEYWAY WITH DURABOND

Remarks (Including Deficiencies/Corrective Actions): NOTED EXCESS
SEEPAGE OF DISCOLORED LIQUID IN SOUTH WEST DITCH

CERTIFICATION: I certify that the above report is complete and correct and that I, or my authorized representative, have inspected all work performed this day by the prime contractor and each subcontractor and have determined that all materials, equipment, and workmanship are in strict compliance with the plans and specifications except as may be noted above.


Signature

10/05/93
Date

- Distribution: 1. Resident Superintendent
2. Independent CQA Officer

DAILY QUALITY CONTROL REPORT
PAGE 1 OF 2

ECC SITE
ZIONSVILLE, INDIANA
PROJECT NUMBER 2396

Date: 10/06/93

Weather: SUNNY MID 70's BREEZY

Work Performed: CONTINUED GRADING AGGREGATE AND COMPACTING
OF ACCESS ROAD. UPON ITS COMPLETION AWD STARTED
EXCAVATING DITCH FROM CROWN - NORTH ON WEST
SIDE OF SZ. FOLLOWING THIS, AWD LAID PIPE
AT GATE AND ALSO CONNECTION PIPE FROM
EAST TO WEST DITCHES.

SMOCK PLACED #4 STONE ON DECON PAD AND
SET DRAIN IN SUMP.

PROJECT RECORD

DAILY QUALITY CONTROL REPORT
PAGE 2 OF 2

Date: 10/06/93

Material/Equipment Delivered (Identify Supplier and Quantity):

MARTIN MARCETTA - 5 LOADS # 53 STONE

Results of Inspections (See Attached Inspection Report): STONE TO SPEC. (IDON)

Results of Testing (See Attached Testing Report): _____

PROJECT RECORD

Verbal Instructions and/or Comments: -NA-

Remarks (Including Deficiencies/Corrective Actions): SMOCK HAD TO

GRIND NORTH CURB TO LEVEL ITS CENTER.

CERTIFICATION: I certify that the above report is complete and correct and that I, or my authorized representative, have inspected all work performed this day by the prime contractor and each subcontractor and have determined that all materials, equipment, and workmanship are in strict compliance with the plans and specifications except as may be noted above.

Signature [Handwritten Signature]

Date 10/06/93

- Distribution: 1. Resident Superintendent
2. Independent CQA Officer

DAILY QUALITY CONTROL REPORT
PAGE 1 OF 2

ECC SITE
ZIONSVILLE, INDIANA
PROJECT NUMBER 2396

Date: 10/07/93

Weather: SUNNY - MID 70s BREEZY

Work Performed: CONTINUED EXCAVATION OF NW DITCH.

THIS WAS EXTREMELY DIFFICULT DUE TO EXCESSIVE
AMOUNT OF DEBRIS. JEFF THEN PROCEEDED TO
EAST DITCH AND BROKE A HYDRAULIC LINE ON TRACK
HOE. PIPE AT CONNECTION OF SZ TO LAYDOWN AREA
WAS COVERED, GRADED AND COMPACTED. WEST DITCH
FROM GATE - SOUTH WAS CLEANED WITH SHOVELS.
RICH AND TONY BEGAN DRESSING EDGES OF STONE IN
SZ.

SMOCK CONSTRUCTED FORMS FOR WEST HALF OF DECOR
PAD. ALSO CONTINUED STONE FOR BASE.

PROJECT RECORD

DAILY QUALITY CONTROL REPORT
PAGE 2 OF 2

Date: 10/07/93

Material/Equipment Delivered (Identify Supplier and Quantity):

SMOCK - 1 LOAD #4 STONE

ELCONCO - 2 POWER POLES

Results of Inspections (See Attached Inspection Report): * STONE

EXCAVATION OF DITCHES - EXTREME AMOUNT OF DEBRIS.

Results of Testing (See Attached Testing Report): -NA-

PROJECT RECORD

Verbal Instructions and/or Comments: SMOCK TO POUR CONCRETE

TOMORROW IN WEST HALF OF DECON PAD

Remarks (Including Deficiencies/Corrective Actions): -NA-

CERTIFICATION: I certify that the above report is complete and correct and that I, or my authorized representative, have inspected all work performed this day by the prime contractor and each subcontractor and have determined that all materials, equipment, and workmanship are in strict compliance with the plans and specifications except as may be noted above.

Scott Wehrman
Signature

10/07/93
Date

- Distribution:
1. Resident Superintendent
 2. Independent CQA Officer

DAILY QUALITY CONTROL REPORT
PAGE 1 OF 2

ECC SITE
ZIONSVILLE, INDIANA
PROJECT NUMBER 2396

Date: 10/08/92

Weather: MID-UPPER 70 MOSTLY SUNNY BREEZY

Work Performed: - SMOCK PREPARED FORMS FOR PAD AND

POURED 4 CORNERS.

-AWD GRADED AREA AROUND DECON PAD

RICH L. CONTINUED EXCAVATION OF EAST CNTRL.

DITCH UNTIL HE EXPOSED CONTAMINANT. AT THE

TIME OF REPORTING STRONG ODOOR EMITTING FROM

EXCAVATION, WORK WAS HAULTED.

PROJECT RECORD

DAILY QUALITY CONTROL REPORT
PAGE 2 OF 2

Date: 10/08/93

Material/Equipment Delivered (Identify Supplier and Quantity):

SMOCK - IMI - 3 TRUCKS OF CONCRETE

Results of Inspections (See Attached Inspection Report): CONCRETE - 5.5 BAG

N/A ENTRAINED, TYPE III HIGH EARLY

Results of Testing (See Attached Testing Report): 3 TRUCKS - 3 CYLINDERS

FROM 1ST TRUCK, SLUMP? FROM EACH, A/E FROM EACH

PROJECT RECORD

Verbal Instructions and/or Comments: WORK HAULTED ON EXCAVATION

OF TRENCHES.

Remarks (Including Deficiencies/Corrective Actions): 3 CRACKS WERE FOUND

IN THE DECON PAD CURBS (CTR EAST, CTR NORTH, CTR WEST)

FINISHER MUST CHIP CRACKS AND FILL WITH SEALER

CERTIFICATION: I certify that the above report is complete and correct and that I, or my authorized representative, have inspected all work performed this day by the prime contractor and each subcontractor and have determined that all materials, equipment, and workmanship are in strict compliance with the plans and specifications except as may be noted above.


Signature

10/08/93
Date

- Distribution:
1. Resident Superintendent
 2. Independent CQA Officer

DAILY QUALITY CONTROL REPORT
PAGE 1 OF 2

ECC SITE
ZIONSVILLE, INDIANA
PROJECT NUMBER 2396

Date: 10/11/93

Weather: Low 50's MOSTLY SUNNY, BRISK

Work Performed: CONTINUED EXCAVATION OF NORTH DITCH
AND CONNECTION TO UNNAMED DITCH. SET 12" RCP
IN DITCH BEHIND DECON PAD. ALSO REMOVED FENCE
ALONG NORTH SIDE OF PROPERTY AND BEGAN GRADING
AREA TO DITCH.

SMOCK - REMOVED FORMS FROM FRIDAY'S POUR
BEGAN REPAIR OF CRACKS IN CURBING. ALSO
BEGAN CONSTRUCTION OF FORMS FOR NEXT POUR.

PROJECT RECORD

DAILY QUALITY CONTROL REPORT
PAGE 2 OF 2

Date: 10/11/93

Material/Equipment Delivered (Identify Supplier and Quantity):

MARTIN MARIETTA - 2 LOADS #2 STONE

Results of Inspections (See Attached Inspection Report): PIPE LAYED HAS GOOD SLOPE
AND COVER IN DITCH IS BEING FINISH GRADED.

Results of Testing (See Attached Testing Report): -NA-

PROJECT RECORD

Verbal Instructions and/or Comments: TOOK SAMPLE OF UNKNOWN
CONTAMINANT IN EAST DITCH FOR VOLATILE ANALYSIS.

Remarks (Including Deficiencies/Corrective Actions): TRUSTEE'S / DOWIE / JACKSON
AGREE TO BACKFILL EAST CNTRL. DITCH AND BUILD BURN
AROUND AREA.

CERTIFICATION: I certify that the above report is complete and correct and that I, or my authorized representative, have inspected all work performed this day by the prime contractor and each subcontractor and have determined that all materials, equipment, and workmanship are in strict compliance with the plans and specifications except as may be noted above.

Scott Westman
Signature

10/11/93
Date

- Distribution: 1. Resident Superintendent
2. Independent CQA Officer

DAILY QUALITY CONTROL REPORT
PAGE 1 OF 2

ECC SITE
ZIONSVILLE, INDIANA
PROJECT NUMBER 2396

Date: 10/12/93

Weather: SUNNY, UPPER 50'S BREEZE

Work Performed: INSTALLED 30" RCP IN NORTH DITCH

ADD 12" RCP AT N.W. COR OF DIVERSION DITCH.

PLACED #8 AND #2 SONE AROUND PIPE. ALSO

DRESSED UP DITCH LINES DUE TO WALLS SAVING IN.

LOGELAND BACKFILLED EAST CNTEL. DITCH AND

DECONED TRACK HOE.

ELCONCO CONSTRUCTING ELECTRICAL SETUP.

SMOCK - FINISH CONSTRUCTING FORMS FOR TOMORROW'S

POUR. REPAIRED CURBS WITH CONSEAL.

PROJECT RECORD

DAILY QUALITY CONTROL REPORT
PAGE 2 OF 2

Date: 10/12/93

Material/Equipment Delivered (Identify Supplier and Quantity):

MARTIN MARIETTA - # 8 AND # 2 STONE

Results of Inspections (See Attached Inspection Report): PIPE HAS FLOW THROUGH

IT.

Results of Testing (See Attached Testing Report): - NA -

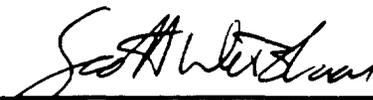
PROJECT RECORD

Verbal Instructions and/or Comments: - NA -

Remarks (Including Deficiencies/Corrective Actions): SENDING SOIL SAMPLE

IN FOR VOLATILE ANALYSIS

CERTIFICATION: I certify that the above report is complete and correct and that I, or my authorized representative, have inspected all work performed this day by the prime contractor and each subcontractor and have determined that all materials, equipment, and workmanship are in strict compliance with the plans and specifications except as may be noted above.


Signature

10/12/93
Date

- Distribution:
1. Resident Superintendent
 2. Independent CQA Officer

DAILY QUALITY CONTROL REPORT
PAGE 1 OF 2

ECC SITE
ZIONSVILLE, INDIANA
PROJECT NUMBER 7396

Date: 10/13/93

Weather: SUNNY HIGH 50s - LOW 60s STRONG BREEZE

Work Performed: CONTINUED GRADING AREA NORTH OF
REMEDIAL ZONE. INSTALLED 18" RCIP AT SOUTH
END OF S2 FOR GATE. CONTINUED NORTH
EAST DITCH BEHIND DECON PAD. BEGAN
INITIAL GRADING OF WW STORAGE PAD.

SMOCK - POURED 4 SECTIONS OF DECON PAD
PREPARED MIDDLE AND RAMPS TO BE
POURED TOMORROW.

PROJECT RECORD

DAILY QUALITY CONTROL REPORT
PAGE 2 OF 2

Date: 10/13/93

Material/Equipment Delivered (Identify Supplier and Quantity):

MARTIN MARIETTA STONE (#2) QUEST ESU. - PPE

ICI/READY MIX - 4 TRUCKS CONCRETE.

Results of Inspections (See Attached Inspection Report): DITCHES &

DECON PAD

Results of Testing (See Attached Testing Report): ~~NA~~ AUTO DIO

HEADSPACE AROUND EAST CNTRL DITCH. GOT READINGS FROM
1 - 220 ppm w/ OVA

Verbal Instructions and/or Comments: ~~NA~~ - NA -

PROJECT RECORD

Remarks (Including Deficiencies/Corrective Actions): AUTO TOOK

HEAD SPACE AROUND EAST CNTRL TRENCH

CERTIFICATION: I certify that the above report is complete and correct and that I, or my authorized representative, have inspected all work performed this day by the prime contractor and each subcontractor and have determined that all materials, equipment, and workmanship are in strict compliance with the plans and specifications except as may be noted above.

Scott Westham
Signature

10/11/93
Date

- Distribution:
1. Resident Superintendent
 2. Independent CQA Officer

DAILY QUALITY CONTROL REPORT
PAGE 1 OF 2

ECC SITE
ZIONSVILLE, INDIANA
PROJECT NUMBER 2396

Date: 10/1/00

Weather: SUNNY 60-80 SLOW BREEZE

Work Performed: JEFF FINISH GRADED NE DITCH AND
ATTEMPTED TO SLOPE SIDEWALLS. ALSO RELOCATED
NORTH DEBRIS PILE AND GRADED AREA AROUND
WW STORAGE PAD. PREPARED WW STORAGE PAD FOR
GRAADING. GRADED SZ ALONG NORTH WEST DITCH.

SMUCK COMPLETED POURING DECON PAD AND
VALVE IN SUMPHI

ALSO RETRIEVED SOIL SAMPLES FROM SCRAP AREA (G...)
TO DETERMINE CONTAMINANT LEVEL

PROJECT RECORD

DAILY QUALITY CONTROL REPORT
PAGE 2 OF 2

Date: 10/14/93

Material/Equipment Delivered (Identify Supplier and Quantity):

REINFORCING BARS - 15 YARDS

Results of Inspections (See Attached Inspection Report): CONCRETE - 5' x 8" DIA. CYL
TESTED - 10/14/93 - W/ SUPER PLASTICIZER

Results of Testing (See Attached Testing Report): SOUND, A/E & CYLINDER
FOR CONCRETE - MIDWEST TESTING INC UNDER MY
SUPERVISION

Verbal Instructions and/or Comments: - NA -

PROJECT RECORD

Remarks (Including Deficiencies/Corrective Actions): - NA -

CERTIFICATION: I certify that the above report is complete and correct and that I, or my authorized representative, have inspected all work performed this day by the prime contractor and each subcontractor and have determined that all materials, equipment, and workmanship are in strict compliance with the plans and specifications except as may be noted above.

John W. ...
Signature

10/14/93
Date

- Distribution:
1. Resident Superintendent
 2. Independent CQA Officer

ECC SITE
ZIONSVILLE, INDIANA
PROJECT NUMBER 2396

Date: 10/15/93

Weather: MID 60s MOSTLY SUNNY LIGHT BREEZE

PROJECT RECORD

Work Performed: AWD BEGAN EXCAVATING WW STORAGE PAD
EXCAVATED TRENCHES AROUND PAD'S PERIMETER AND COMPACTED
THEM.

SMOCK REMOVED REMAINING FORMS FROM DECAN PAD
AND PREPARED FOR CAULKING ON MONDAY.

BOBAUTIO CONTINUED QEM'S SOIL SAMPLING AROUND EAST
CNTRL AREA. THIS WAS BEING PERFORMED SOLELY BY
QEM - NO AWD INVOLVEMENT. *NOTE* THERE IS NO
PROVISION IN THE AWD HASP FOR ANY SAMPLING OF THIS
KIND DURING THIS PHASE.

I ~~FOUND~~ PICKED UP SAMPLE OF GEOMEMBRANE FROM
TAYLOR CONST. TO BE SENT TO LAB FOR CONFORMANCE
TESTING.

DAILY QUALITY CONTROL REPORT
PAGE 2 OF 2

Date: 10/15/93

Material/Equipment Delivered (Identify Supplier and Quantity):

BACK-HOE - C&E RENTAL, VIBRATOR/COMPACTOR - C&E RENTAL
BOTH REMOVED AT END OF DAY

Results of Inspections (See Attached Inspection Report): W W PAD UNDER
WAY

Results of Testing (See Attached Testing Report): RECEIVED FAX COMMUNICATION
FROM HERITAGE LAB - TENTATIVE RESULTS FOR LEAD ON
ECC-04A1 - TANK - 01 IS 40 MS/AS - QC FAILED, SO SAMPLE
HAS TO BE RE-ANALYZED.

Verbal Instructions and/or Comments: - NA -

PROJECT RECORD

Remarks (Including Deficiencies/Corrective Actions): - NA -

CERTIFICATION: I certify that the above report is complete and correct and that I, or my authorized representative, have inspected all work performed this day by the prime contractor and each subcontractor and have determined that all materials, equipment, and workmanship are in strict compliance with the plans and specifications except as may be noted above.


Signature

10/15/93
Date

- Distribution: 1. Resident Superintendent
2. Independent CQA Officer

DAILY QUALITY CONTROL REPORT
PAGE 1 OF 2

ECC SITE
ZIONSVILLE, INDIANA
PROJECT NUMBER 2396

Date: 10/18/93

Weather: MOSTLY CLOUDY LOW 60s BREEZE

Work Performed: AWD CONTINUED EXCAVATION OF W.W.
STORAGE PAD. COMPLETED EXCAVATION AND FINISH
GRADING. ROLLED PAD WITH DD-22 ROLLER.
COVERED PAD WITH VISQUEEN.

SMOCK - CAULKED DECON PAD

BAR AUTIQ - CONTINUED SOIL SAMPLING ON OWN
ACCORD. AWD IN NO WAY INVOLVED.

PROJECT RECORD

DAILY QUALITY CONTROL REPORT
PAGE 2 OF 2

Date: 10/18/93

Material/Equipment Delivered (Identify Supplier and Quantity):

RESCO - DD22 ROLLER , JACK'S TOOL - Bobcat w/ AUGER
IN. Oxygen - 30 Bottles , 8 Bottles Acetylene

Results of Inspections (See Attached Inspection Report): WWW STORAGE PAD IS
TO GRADE

Results of Testing (See Attached Testing Report): NA

Verbal Instructions and/or Comments: NA

PROJECT RECORD

Remarks (Including Deficiencies/Corrective Actions): NA

CERTIFICATION: I certify that the above report is complete and correct and that I, or my authorized representative, have inspected all work performed this day by the prime contractor and each subcontractor and have determined that all materials, equipment, and workmanship are in strict compliance with the plans and specifications except as may be noted above.

Scott K. [Signature]
Signature

10/18/93
Date

- Distribution:
1. Resident Superintendent
 2. Independent CQA Officer

DAILY QUALITY CONTROL REPORT
PAGE 1 OF 2

ECC SITE
ZIONSVILLE, INDIANA
PROJECT NUMBER 2396

Date: 10/19/93

Weather: OVERCAST, LOW 60'S, OCCASIONAL RAIN
10-15 mph WIND

Work Performed: BEGAN TANK CUTTING ON CONCRETE
PAD SOUTH OF PROCESS BLDG. ALSO DUG POST
HOLES FOR DECON PAD SPLASH GUARDS. TANKS 7-12 &
T-

BOE AWT10 - CONTINUED SOIL SAMPLING UNASSISTED BY
AWD.

PROJECT RECORD

DAILY QUALITY CONTROL REPORT
PAGE 2 OF 2

Date: 10/19/93

Material/Equipment Delivered (Identify Supplier and Quantity):

RESCO - JCB 13621406

Results of Inspections (See Attached Inspection Report): DECON PAD - NORTH

CURB HAS SETTLING CRACKS

Results of Testing (See Attached Testing Report): - NA -

H&S TESTING PER TANK PRIOR TO, AND DURING CUTTING.

PROJECT RECORD

Verbal Instructions and/or Comments: - NA -

Remarks (Including Deficiencies/Corrective Actions): - NA

CERTIFICATION: I certify that the above report is complete and correct and that I, or my authorized representative, have inspected all work performed this day by the prime contractor and each subcontractor and have determined that all materials, equipment, and workmanship are in strict compliance with the plans and specifications except as may be noted above.


Signature

10/19/93
Date

- Distribution:
1. Resident Superintendent
 2. Independent CQA Officer

DAILY QUALITY CONTROL REPORT
PAGE 1 OF 2

ECC SITE
ZIONSVILLE, INDIANA
PROJECT NUMBER 2396

Date: 10/20/93

Weather: RAIN Low 60s BREEZE

Work Performed: PREPARED TANK T-34 FOR CUTTING. DUE
TO RAIN NO CUTTING WAS DONE. CONTINUED DIGGING
POST HOLES FOR SPLASH GUARDS ON DECON PAD.

DAY CALLED EARLY DUE TO RAIN.

PROJECT RECORD

DAILY QUALITY CONTROL REPORT
PAGE 2 OF 2

Date: 10/20/93

Material/Equipment Delivered (Identify Supplier and Quantity):

NONE

Results of Inspections (See Attached Inspection Report): W.W. STOR PAD STILL

DRY FOR GEOMEMBRANE.

Results of Testing (See Attached Testing Report): OBTAINED SAMPLE

OF BOILER DOOR MAT'L FOR REMOVAL.

Verbal Instructions and/or Comments: -NA-

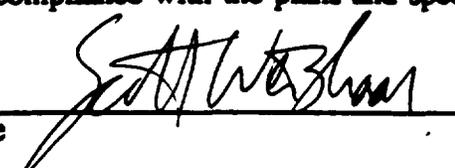
PROJECT RECORD

Remarks (Including Deficiencies/Corrective Actions): NO MORE ~~REMARKS~~

EXCAVATION SOUTH OF W.W. STOR PAD.

CERTIFICATION: I certify that the above report is complete and correct and that I, or my authorized representative, have inspected all work performed this day by the prime contractor and each subcontractor and have determined that all materials, equipment, and workmanship are in strict compliance with the plans and specifications except as may be noted above.

Signature



Date

10/20/93

- Distribution:
1. Resident Superintendent
 2. Independent CQA Officer

DAILY QUALITY CONTROL REPORT
PAGE 1 OF 2

ECC SITE
ZIONSVILLE, INDIANA
PROJECT NUMBER 2396

Date: 10/21/93

Weather: WINDY MID 50'S CLEAR SKY

Work Performed: FINISHED DIGGING POST HOLES FOR SPLASH
GUARDS AND SET POSTS. PUMPED RAW WATER OFF WW
PAD FOR PREP TO LINDER. CONTINUED TANK
CUTTING ON SOUTH CONCRETE PAD.

PROJECT RECORD

DAILY QUALITY CONTROL REPORT
PAGE 2 OF 2

Date: 10/21/93

Material/Equipment Delivered (Identify Supplier and Quantity):

Results of Inspections (See Attached Inspection Report): WW STORAGE PAD

PREPARED FOR LINER.

Results of Testing (See Attached Testing Report): -NA-

Verbal Instructions and/or Comments: -NA- **PROJECT RECORD**

Remarks (Including Deficiencies/Corrective Actions): LEAD TEST PER TANK

Prior TO CUTTING

CERTIFICATION: I certify that the above report is complete and correct and that I, or my authorized representative, have inspected all work performed this day by the prime contractor and each subcontractor and have determined that all materials, equipment, and workmanship are in strict compliance with the plans and specifications except as may be noted above.


Signature

10/21/93
Date

- Distribution: 1. Resident Superintendent
2. Independent CQA Officer

DAILY QUALITY CONTROL REPORT
PAGE 1 OF 2

ECC SITE
ZIONSVILLE, INDIANA
PROJECT NUMBER 2396

Date: 10/22/93

Weather: WINDY WPER 50'S SUNNY

Work Performed: SMOOTHED CORNERS ON WW PAD FOR
AND PLACED GEOTEXTILE.
GEOMEMBRANE. ^ REGRADED NORTH AREA OF S.Z.

JEFF MOVED TANKS FOR PREP TO CUTTING. RESET
REMEDIAL BOUNDARY AND LOCATED ANGLE BREAKS IN
FZ BOUNDARY FENCE.

BOB AUTO CONTINUED SOIL SAMPLING. NOW UNDER
AWD SUPERVISION

PROJECT RECORD

DAILY QUALITY CONTROL REPORT
PAGE 2 OF 2

Date: 10/22/93

Material/Equipment Delivered (Identify Supplier and Quantity):

SMITHY STONE - 1 LOAD SMOOTH AGGREGATE 1 LOAD #53 STONE
RESCO - BOBCAT

Results of Inspections (See Attached Inspection Report): WW PAD READY
FOR LINER

Results of Testing (See Attached Testing Report): PENETROMETER
USED TO TEST COMPACTION OF WW PAD FLOOR
- GOOD: RESULTS OF >4.5 ton/ft²

Verbal Instructions and/or Comments: - NA -

PROJECT RECORD

Remarks (Including Deficiencies/Corrective Actions): - NA -

CERTIFICATION: I certify that the above report is complete and correct and that I, or my authorized representative, have inspected all work performed this day by the prime contractor and each subcontractor and have determined that all materials, equipment, and workmanship are in strict compliance with the plans and specifications except as may be noted above.


Signature

10/22/93
Date

- Distribution:
1. Resident Superintendent
 2. Independent CQA Officer

DAILY QUALITY CONTROL REPORT
PAGE 1 OF 2

ECC SITE
ZIONSVILLE, INDIANA
PROJECT NUMBER 2996

Date: 10/25/93

Weather: MID 60s SUNNY BREEZE

Work Performed: TAYLOR CONSTRUCTION INSTALLED

GEOMEMBRANE ON WW STORAGE PAD.

AND PLACED GEOTEXTILE, SUMP AND #3

STONE. BACKFILLED TRENCHES AROUND PAD

AND ~~CONTINUED~~ CONTINUED GRADING SZ AROUND

DECON & WW PAD.

PROJECT RECORD

DAILY QUALITY CONTROL REPORT
PAGE 2 OF 2

Date: 10/23/93

Material/Equipment Delivered (Identify Supplier and Quantity):

LEBANON CONCRETE - 1 1/2 yds CONCRETE FOR SPLASH
GUARD POST HOLES.

Results of Inspections (See Attached Inspection Report): GEO MEMBRANE WENT
IN SMOOTH AND TO SPEC.

Results of Testing (See Attached Testing Report): GEO MEMBRANE TESTED
ALSO PENETROMETER USED ON FLOOR OF WW
PAD FOR COMPACTION

Verbal Instructions and/or Comments: _____

PROJECT RECORD

Remarks (Including Deficiencies/Corrective Actions): _____

CERTIFICATION: I certify that the above report is complete and correct and that I, or my authorized representative, have inspected all work performed this day by the prime contractor and each subcontractor and have determined that all materials, equipment, and workmanship are in strict compliance with the plans and specifications except as may be noted above.

Signature Scott Wershaw

Date 10/23/93

- Distribution:
1. Resident Superintendent
 2. Independent CQA Officer

DAILY QUALITY CONTROL REPORT
PAGE 1 OF 2

ECC SITE
ZIONSVILLE, INDIANA
PROJECT NUMBER 2396

Date: 10/25/93

Weather: Cool low 60s CLOUDY SLIGHT BREEZE

Work Performed: CUT TANKS. CONTINUED CONSTRUCTION
OF SPLASH GUARDS ON DECON PAD. FINISHED POURING
CONCRETE FOR SPLASH GUARD POSTS. PLACED STONE
ON WW STORAGE PAD AND GRADED AREA AROUND
PAD.

FENCE COMPANY BEGAN PLACING EXCLUSION
ZONE FENCE FROM TRAILERS TO SOUTH

PROJECT RECORD

DAILY QUALITY CONTROL REPORT
PAGE 1 OF 2

Date: 10/25/93

Material/Equipment Delivered (Identify Supplier and Quantity):

E-Z FENCING 3 LOADS #53 STONE FROM MARTIN
MARLETTM 1 1/2 Yds CONCRETE - LEBANON CONCRETE

Results of Inspections (See Attached Inspection Report): WW PAD STONE
1' DEPTH. SPLASH GUARDS FOR DECON PAD UNDER
CONST.

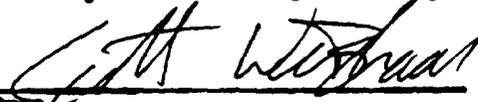
Results of Testing (See Attached Testing Report): - NA -
SENT GEOTEXTILE & GEOMEMBRANE SAMPLES
TO GEOTECHNICS.

Verbal Instructions and/or Comments: - NA -

PROJECT RECORD

Remarks (Including Deficiencies/Corrective Actions): - NA -

CERTIFICATION: I certify that the above report is complete and correct and that I, or my authorized representative, have inspected all work performed this day by the prime contractor and each subcontractor and have determined that all materials, equipment, and workmanship are in strict compliance with the plans and specifications except as may be noted above.


Signature

10/25/93
Date

- Distribution: 1. Resident Superintendent
2. Independent CQA Officer

DAILY QUALITY CONTROL REPORT
PAGE 1 OF 2

ECC SITE
ZIONSVILLE, INDIANA
PROJECT NUMBER 7396

Date: 10/26/93

Weather: LOW 60s MOSTLY SUNNY STRONG BREEZE

Work Performed: CONTINUED CUTTING TANKS ON SOUTH
CONCRETE PAD. ALSO CONTINUED CONSTRUCTING DECON
PAD SPLASH GUARDS. AND PLACED GEOTEXTILE AROUND
WW PAD AND DECON PAD. PLACED #2 STONE
ON LIAER. SZ ALMOST COMPLETE.

CREW CONTINUED SETTING EXCLUSION ZONE
FENCE FROM NW CORNER OF SCRAP AREA
TO NORTH.

PROJECT RECORD

DAILY QUALITY CONTROL REPORT
PAGE 2 OF 2

Date: 10/26/93

Material/Equipment Delivered (Identify Supplier and Quantity):

MARTIN MARIETTA - #2 STONE (12 LOADS)

RESCO - INGERSOLL RAND DD-65 VIBRATORY ROLLER

Results of Inspections (See Attached Inspection Report): FENCING OF E2 PROGRESSING

SZ NORTH END READY FOR #53 STONE

Results of Testing (See Attached Testing Report): - NA -

PROJECT RECORD

Verbal Instructions and/or Comments: _____

Remarks (Including Deficiencies/Corrective Actions): TANK T-11 CAUGHT ON
^{INTERNAL} FIRE 1- WAS EXTINGUISHED WITH DRY CHEMICAL EXTINGUISHERS
AND WATER

CERTIFICATION: I certify that the above report is complete and correct and that I, or my authorized representative, have inspected all work performed this day by the prime contractor and each subcontractor and have determined that all materials, equipment, and workmanship are in strict compliance with the plans and specifications except as may be noted above.

Signature



Date

10/26/93

Distribution: 1. Resident Superintendent
2. Independent CQA Officer

DAILY QUALITY CONTROL REPORT
PAGE 1 OF 2

ECC SITE
ZIONSVILLE, INDIANA
PROJECT NUMBER 2396

Date: 10/27/93

Weather: MID 50s CLOUDY WINDY

Work Performed: CONTINUED AND FINISHED SPLASH GUARDS FOR DECON
PAD. PLACED #2 AND #53 AGGREGATE @ NORTH END OF
SZ. MOVED OUT TANK PIECES AND CLEANED PAD.
RELOCATED DRUMS TO CONCRETE PAD. POSITIONED
8,000 gal FRAC TANKS ON WW PAD

PROJECT RECORD

DAILY QUALITY CONTROL REPORT
PAGE 2 OF 2

Date: 10/27/93

Material/Equipment Delivered (Identify Supplier and Quantity):

MARTIN MARIETTA - #2 AND #53 STONE
2 - 8,000 GAL FRAC TANKS

Results of Inspections (See Attached Inspection Report): SZ ALMOST COMPLETE.

DECON PAD COMPLETE.

Results of Testing (See Attached Testing Report): - NA -

Verbal Instructions and/or Comments:

PROJECT RECORD

Remarks (Including Deficiencies/Corrective Actions):

CERTIFICATION: I certify that the above report is complete and correct and that I, or my authorized representative, have inspected all work performed this day by the prime contractor and each subcontractor and have determined that all materials, equipment, and workmanship are in strict compliance with the plans and specifications except as may be noted above.

Signature



Date

10/27/93

- Distribution:
1. Resident Superintendent
 2. Independent CQA Officer

DAILY QUALITY CONTROL REPORT
PAGE 1 OF 2

ECC SITE
ZIONSVILLE, INDIANA
PROJECT NUMBER 2396

Date: 10/28/93

Weather: WINDY, COLD - LOW 50s, OVERCAST

Work Performed: SET UP PRESSURE SPRAYER AND BEGAN
WASHING TANK QUARTERS. BEGAN TANK CUTTING ON
DECON PAD.

PROJECT RECORD

DAILY QUALITY CONTROL REPORT
PAGE 2 OF 2

Date: 10/28/93

Material/Equipment Delivered (Identify Supplier and Quantity):

TRANS-CHEM - 8000 gal H₂O FOR SPRAYER

HOOSIER WATER - POTABLE WATER - AWD-SPRAYER

Results of Inspections (See Attached Inspection Report): FINISHED SUPPORT ZONE

DECON PAD FINISHED AND OPERABLE

Results of Testing (See Attached Testing Report): CONCRETE FOR DECON PAD

MEETS ASTM STANDARDS

Verbal Instructions and/or Comments: ALL REMAINING TANKS

TO BE CUT ON DECON PAD ONLY

Remarks (Including Deficiencies/Corrective Actions)

PROJECT RECORD

CERTIFICATION: I certify that the above report is complete and correct and that I, or my authorized representative, have inspected all work performed this day by the prime contractor and each subcontractor and have determined that all materials, equipment, and workmanship are in strict compliance with the plans and specifications except as may be noted above.

Scott Wetzel
Signature

10/28/93
Date

- Distribution:
1. Resident Superintendent
 2. Independent CQA Officer

DAILY QUALITY CONTROL REPORT
PAGE 1 OF 2

ECC SITE
ZIONSVILLE, INDIANA
PROJECT NUMBER 2396

Date: 10/29/93

Weather: WINDY, COLD-LOWERS, PARTLY CLOUDY

Work Performed: TANK DESTRUCTION AND PRESSURE
WASHING ON DECON PAD. MOVED
REMAINING TANKS TO STAGING AREA IN
RZ RH DECON PAD. GRADED MOUND OF SOIL
ALONG DIVERSION DITCH ON NORTH EAST.

PROJECT RECORD

DAILY QUALITY CONTROL REPORT
PAGE 2 OF 2

Date: 10/29/93

Material/Equipment Delivered (Identify Supplier and Quantity):

RESCO - KOMATSU PC220 EXCAVATOR W/ GRAPPLE BUCKET

Results of Inspections (See Attached Inspection Report): TANK CUTTING

Results of Testing (See Attached Testing Report): - NA -

Verbal Instructions and/or Comments: ALL REMAINING TANKS
WILL BE HANDLED ON DECON PAD ONLY

Remarks (Including Deficiencies/Corrective Actions):

PROJECT RECORD

CERTIFICATION: I certify that the above report is complete and correct and that I, or my authorized representative, have inspected all work performed this day by the prime contractor and each subcontractor and have determined that all materials, equipment, and workmanship are in strict compliance with the plans and specifications except as may be noted above.

Signature [Handwritten Signature]

Date 10/29/93

- Distribution:
1. Resident Superintendent
 2. Independent CQA Officer

DAILY QUALITY CONTROL REPORT
PAGE 1 OF 2

ECC SITE
ZIONSVILLE, INDIANA
PROJECT NUMBER 2396

Date: 10/01/93

Weather: Low 50s MOSTLY SUNNY BRISK BREEZE

Work Performed: CUT TANKS AND PRESSURE WASHED
PIECES ON DECON PAD. LOADED OUT PIECES
INTO ROLL OFF BOXES.

PROJECT RECORD

DAILY QUALITY CONTROL REPORT
PAGE 2 OF 2

Date: 11/01/93

Material/Equipment Delivered (Identify Supplier and Quantity):

4 ROLL OFFS by LUSCO ~~3~~ 3 SEMI TRAILERS
(OPEN) WINSKI

Results of Inspections (See Attached Inspection Report): TANKS CUT AND
SPRAYED.

Results of Testing (See Attached Testing Report): _____

Verbal Instructions and/or Comments: _____

PROJECT RECORD

Remarks (Including Deficiencies/Corrective Actions): _____

CERTIFICATION: I certify that the above report is complete and correct and that I, or my authorized representative, have inspected all work performed this day by the prime contractor and each subcontractor and have determined that all materials, equipment, and workmanship are in strict compliance with the plans and specifications except as may be noted above.

Scott W. Williams
Signature

11/01/93
Date

- Distribution: 1. Resident Superintendent
2. Independent CQA Officer

DAILY QUALITY CONTROL REPORT
PAGE 1 OF 2

ECC SITE
ZIONSVILLE, INDIANA
PROJECT NUMBER 7396

Date: 11/02/93

Weather: HIGH 40s OVERCAST W-E WIND

Work Performed: CONTINUED TANK DESTRUCTION

CUT AND SPRAYED BEFORE PLACING PIECES IN ROLL-
OFFS FOR TRANSPORTATION OFFSITE

PROJECT RECORD

DAILY QUALITY CONTROL REPORT
PAGE 2 OF 2

Date: 11/02/93

Material/Equipment Delivered (Identify Supplier and Quantity):

~~XXXXXXXXXX~~ - NA -

Results of Inspections (See Attached Inspection Report): TANK CUTTING AND

SPRAY

Results of Testing (See Attached Testing Report): HASP AIR MONITORING

ONLY

Verbal Instructions and/or Comments: - NA - **PROJECT RECORD**

Remarks (Including Deficiencies/Corrective Actions): - NA -

CERTIFICATION: I certify that the above report is complete and correct and that I, or my authorized representative, have inspected all work performed this day by the prime contractor and each subcontractor and have determined that all materials, equipment, and workmanship are in strict compliance with the plans and specifications except as may be noted above.

Signature

Scott Weidman

Date

11/02/93

- Distribution:
1. Resident Superintendent
 2. Independent CQA Officer

DAILY QUALITY CONTROL REPORT
PAGE 1 OF 2

ECC SITE
ZIONSVILLE, INDIANA
PROJECT NUMBER 7396

Date: 11/03/93

Weather: LOW SD. CLEAR WINDY

Work Performed: TANK DESTRUCTION CONTINUED. LOADED
OUT SCRAP. PLACED AGGREGATE AROUND
PROCESS BLDG. CONTINUED PICKING UP SITE
MATERIALS AND STOCK PILING.

PROJECT RECORD

DAILY QUALITY CONTROL REPORT
PAGE 2 OF 2

Date: 11/03/93

Material/Equipment Delivered (Identify Supplier and Quantity):

JACK'S TOOL RENTAL - BOBCAT

Results of Inspections (See Attached Inspection Report): TANIC CUTTING / DECON

CONTINUED.

Results of Testing (See Attached Testing Report): - NA -

PROJECT RECORD

Verbal Instructions and/or Comments: - NA -

Remarks (Including Deficiencies/Corrective Actions): - NA -

CERTIFICATION: I certify that the above report is complete and correct and that I, or my authorized representative, have inspected all work performed this day by the prime contractor and each subcontractor and have determined that all materials, equipment, and workmanship are in strict compliance with the plans and specifications except as may be noted above.

Scott Wilson
Signature

11/03/93
Date

- Distribution: 1. Resident Superintendent
2. Independent CQA Officer

DAILY QUALITY CONTROL REPORT
PAGE 1 OF 2

ECC SITE
ZIONSVILLE, INDIANA
PROJECT NUMBER 2396

Date: 11/04/93

Weather: Cool - Low SO₂ PARTLY CLOUDY

Work Performed: CONTINUED TANK DESTRUCTION AND
DECON. LOADED OUT SCRAP FOR OFFSITE DISPOSAL (METALS ONLY)
BEGAN DISMANTLING PROCESS BUILDING. USED
EXCAVATOR TO PICK METAL FROM BLDG. AND FELL
REMAINDER ONTO CONCRETE SLAB.

PROJECT RECORD

DAILY QUALITY CONTROL REPORT
PAGE 2 OF 2

Date: 11/04/93

Material/Equipment Delivered (Identify Supplier and Quantity):

ROLL OFF BOX BY OSCAR WINSKI CO.

Results of Inspections (See Attached Inspection Report): RBLDG DISMANTLE A-7

TANK DESTRUCTION

Results of Testing (See Attached Testing Report): ~~ASBESTOS~~ ASBESTOS

TESTING OF A-FRAME DEBRIS PILE FOR APPROVAL
FROM LANDFILL

Verbal Instructions and/or Comments: -NA-

PROJECT RECORD

Remarks (Including Deficiencies/Corrective Actions): -NA-

CERTIFICATION: I certify that the above report is complete and correct and that I, or my authorized representative, have inspected all work performed this day by the prime contractor and each subcontractor and have determined that all materials, equipment, and workmanship are in strict compliance with the plans and specifications except as may be noted above.

Gott Weisshay
Signature

11/04/93
Date

- Distribution: 1. Resident Superintendent
2. Independent CQA Officer

DAILY QUALITY CONTROL REPORT
PAGE 1 OF 2

ECC SITE
ZIONSVILLE, INDIANA
PROJECT NUMBER 2396

Date: 11/05/93

Weather: WINDY COLD HIGH 40s OVERCAST

Work Performed: CONTINUED BLDG. DISMANTLEMENT
SEPERATED METAL FOR SCRAP TO BE SENT OFF-
SITE BY WINSKY INC.
PICKUP OF SCRAP LAYING IN REMEDIAL
BOUNDARY FOR WASH.

PROJECT RECORD

DAILY QUALITY CONTROL REPORT
PAGE 2 OF 2

Date: 11/05/03

Material/Equipment Delivered (Identify Supplier and Quantity):

Results of Inspections (See Attached Inspection Report): BLDG. DOWN. READY
FOR DISPOSAL

Results of Testing (See Attached Testing Report): NA

Verbal Instructions and/or Comments: NA

PROJECT RECORD

Remarks (Including Deficiencies/Corrective Actions): NA

CERTIFICATION: I certify that the above report is complete and correct and that I, or my authorized representative, have inspected all work performed this day by the prime contractor and each subcontractor and have determined that all materials, equipment, and workmanship are in strict compliance with the plans and specifications except as may be noted above.

Signature

Ernst Weitzman

Date

11/05/03

- Distribution: 1. Resident Superintendent
2. Independent CQA Officer

DAILY QUALITY CONTROL REPORT
PAGE 1 OF 2

ECC SITE
ZIONSVILLE, INDIANA
PROJECT NUMBER 2396

Date: 11/08/93

Weather: ~~LOW~~ LOW 50s SUNNY BREEZE CLEAR

Work Performed: CONTINUED SITE DEBRIS CLEANUP
AND BLDG DEBRIS SEPARATION - LOADED OUT
SCRAP METAL/STEEL INTO ROLL-OFF.
SET MONITORING WELL BARRICADES. REPAIRED
REMEDIAL BOUNDARY TAPE AND HIGH VISUAL
SECURITY FENCE. BUILT FOOTBRIDGE FOR
CROSSING DIVERSION DITCH BEHIND DECON TRAILER.

PROJECT RECORD

DAILY QUALITY CONTROL REPORT
PAGE 2 OF 2

Date: 11/08/93

Material/Equipment Delivered (Identify Supplier and Quantity):

COE - BOBCAT 742 w/ AUGER.

METZGER LUMBER - LUMBER FOR FOOTBRIDGE.

Results of Inspections (See Attached Inspection Report): BRIDGE IS COMPLETE

MONITOR WELL BARRICADES SET.

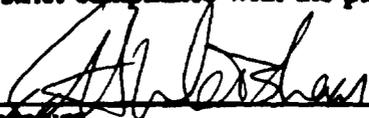
Results of Testing (See Attached Testing Report): -NA-

Verbal Instructions and/or Comments: -NA-

PROJECT RECORD

Remarks (Including Deficiencies/Corrective Actions): -NA-

CERTIFICATION: I certify that the above report is complete and correct and that I, or my authorized representative, have inspected all work performed this day by the prime contractor and each subcontractor and have determined that all materials, equipment, and workmanship are in strict compliance with the plans and specifications except as may be noted above.


Signature

11/08/93
Date

- Distribution: 1. Resident Superintendent
2. Independent CQA Officer

DAILY QUALITY CONTROL REPORT
PAGE 1 OF 2

ECC SITE
ZIONSVILLE, INDIANA
PROJECT NUMBER 2396

Date: 11/09/93

Weather: SUNNY CLEAR NO WIND 53°

Work Performed: SITE DEBRIS CLEANUP.
PUT CONCRETE IN MONITOR WELL
BARRICADES. CLEANED DECON PAD

PROJECT RECORD

DAILY QUALITY CONTROL REPORT
PAGE 2 OF 2

Date: 11/07/93

Material/Equipment Delivered (Identify Supplier and Quantity):

STEEL CREEK - 1 LOAD R.P.P.

Results of Inspections (See Attached Inspection Report): NA

Results of Testing (See Attached Testing Report): NA

Verbal Instructions and/or Comments: NA

PROJECT RECORD

Remarks (Including Deficiencies/Corrective Actions): NA

CERTIFICATION: I certify that the above report is complete and correct and that I, or my authorized representative, have inspected all work performed this day by the prime contractor and each subcontractor and have determined that all materials, equipment, and workmanship are in strict compliance with the plans and specifications except as may be noted above.

Scott Wetherman
Signature

11/09/93
Date

- Distribution:
1. Resident Superintendent
 2. Independent CQA Officer

DAILY QUALITY CONTROL REPORT
PAGE 1 OF 2

ECC SITE
ZIONSVILLE, INDIANA
PROJECT NUMBER 2396

Date: 11/10/93

Weather: SUNNY CLEAR 55° WIND BREEZE

Work Performed: CUT TANK T-33. RIPPED END OFF
T-21 & T-16. PLACED RIP RAP IN DIVERSION DITCH
NORTH EAST OF DECON PAD AND ON WEST SIDE OF
NORTH DITCH CULVERT. CREW CLEANED OUT
TOOL/BREAK TRAILER FOR DEMOB.

PROJECT RECORD

DAILY QUALITY CONTROL REPORT
PAGE 2 OF 2

Date: 11/10/93

Material/Equipment Delivered (Identify Supplier and Quantity):

RESCO RENTS - EXCAVATOR BUCKET

Results of Inspections (See Attached Inspection Report): DITCH - RIP RAP

PLACED

Results of Testing (See Attached Testing Report): PCB RESULTS ON

TANKS RETURNED - T-16 & T-21 POSITIVE T-33 - NEGATIVE

Verbal Instructions and/or Comments: - NA -

PROJECT RECORD

Remarks (Including Deficiencies/Corrective Actions): - NA

CERTIFICATION: I certify that the above report is complete and correct and that I, or my authorized representative, have inspected all work performed this day by the prime contractor and each subcontractor and have determined that all materials, equipment, and workmanship are in strict compliance with the plans and specifications except as may be noted above.

Signature Scott Weisz

Date 11/10/93

- Distribution:
1. Resident Superintendent
 2. Independent CQA Officer

DAILY QUALITY CONTROL REPORT
PAGE 1 OF 2

ECC SITE
ZIONSVILLE, INDIANA
PROJECT NUMBER 2396

Date: 11/11/93

Weather: OVERCAST - COOL Low 50s

Work Performed: CUT REMAINING 3 TANKS
AND LOADED OUT FOR SCRAP. FINE GRADED
SUPPORT ZONE. ADDED #53 STONE TO FINISH
EDGES ON WEST SIDE.

PROJECT RECORD

DAILY QUALITY CONTROL REPORT
PAGE 2 OF 2

Date: 11/11/93

Material/Equipment Delivered (Identify Supplier and Quantity):

- MARTIN MARIETTA - # 53 STAVE

Results of Inspections (See Attached Inspection Report): SUPPORT ZONE

REGRADE

Results of Testing (See Attached Testing Report): ~~NA~~ TWO TANKS

HAVE PCBs

Verbal Instructions and/or Comments: - NA - **PROJECT RECORD**

Remarks (Including Deficiencies/Corrective Actions): - NA -

CERTIFICATION: I certify that the above report is complete and correct and that I, or my authorized representative, have inspected all work performed this day by the prime contractor and each subcontractor and have determined that all materials, equipment, and workmanship are in strict compliance with the plans and specifications except as may be noted above.

Signature Scott [Signature]

Date 11/11/93

- Distribution:
1. Resident Superintendent
 2. Independent CQA Officer

DAILY QUALITY CONTROL REPORT
PAGE 1 OF 2

ECC SITE
ZIONSVILLE, INDIANA
PROJECT NUMBER 2396

Date: 11/12/93

Weather: OVERCAST 55°

Work Performed: INITIATED BOILER DESTRUCTION.
CUT EXTERIOR SHELL AND PULLED OFF
COIL PIPES. CONTINUED FINISH GRADE
THE SITE SUPPORT ZONE WEST EDGE

PROJECT RECORD

DAILY QUALITY CONTROL REPORT
PAGE 2 OF 2

Date: 11/12/93

Material/Equipment Delivered (Identify Supplier and Quantity):

MARTIN MARBETTA - #53 STONE

Results of Inspections (See Attached Inspection Report):

FINISH GRADING ST

Results of Testing (See Attached Testing Report):

- NA -

Verbal Instructions and/or Comments:

NA

Remarks (Including Deficiencies/Corrective Actions):

- NA -

PROJECT RECORD

CERTIFICATION: I certify that the above report is complete and correct and that I, or my authorized representative, have inspected all work performed this day by the prime contractor and each subcontractor and have determined that all materials, equipment, and workmanship are in strict compliance with the plans and specifications except as may be noted above.

Signature

Date

11/12/93

- Distribution:
1. Resident Superintendent
 2. Independent CQA Officer

DAILY QUALITY CONTROL REPORT
PAGE 1 OF 2

ECC SITE
ZIONSVILLE, INDIANA
PROJECT NUMBER 2396

Date: 11/15/93

Weather: RAIN Low SDs MILD BREEZE

Work Performed: CONTINUED DESTRUCTION OF PROCESS

BLD. BOILER. SEGREGATED/SEPERATED SITE DEBRIS

FOR "LOADING OUT" CONTINUED FINISH GRADING

SUPPORT ZONE.

HOOSIER FENCE BEGAN INSTALLATION OF SITE

SECURITY FENCE AROUND NORTH END.

PROJECT RECORD

DAILY QUALITY CONTROL REPORT
PAGE 2 OF 2

Date: 11/15/93

Material/Equipment Delivered (Identify Supplier and Quantity):

HOOSIER FENCE - SECURITY FENCE

Results of Inspections (See Attached Inspection Report): SECURITY FENCE INSTALLATION

ACCORDING TO SPEC.

Results of Testing (See Attached Testing Report): - N/A -

PROJECT RECORD

Verbal Instructions and/or Comments: - N/A -

Remarks (Including Deficiencies/Corrective Actions): ~~QEM~~ QEM AND

BANKERS STILL DEBATING FENCE LOCATION ON WEST SIDE

CERTIFICATION: I certify that the above report is complete and correct and that I, or my authorized representative, have inspected all work performed this day by the prime contractor and each subcontractor and have determined that all materials, equipment, and workmanship are in strict compliance with the plans and specifications except as may be noted above.

E. J. [Signature]
Signature

11/15/93
Date

- Distribution: 1. Resident Superintendent
2. Independent CQA Officer

DAILY QUALITY CONTROL REPORT
PAGE 1 OF 2

ECC SITE
ZIONSVILLE, INDIANA
PROJECT NUMBER 2396

Date: 11/16/93

Weather: OVERCAST 50 LITE BREEZE

Work Performed: "LOADED-OUT" SOUTH DEBRIS PILE
AND A-FRAME DEBRIS PILE
DECOMMISSIONED DECON PAD AND CLEANED
SUMP.

HOOSIER FENCE CO INSTALLED POSTS FOR
SUPPORT ZONE SECURITY FENCE.

PROJECT RECORD

DAILY QUALITY CONTROL REPORT
PAGE 1 OF 2

ECC SITE
ZIONSVILLE, INDIANA
PROJECT NUMBER 2326

Date: 11/1-83

Weather: RAIN 40° TRISK

Work Performed: CONTINUED "LOADING OUT" ROLL OFFS
W/ A-FRAME DEBRIS. FINALIZED SUPPORT ZONE
AGGREGATE PLACEMENTS AT SOUTH END AND WHERE DEC-
AND BREAK TRAILERS WERE. SZ IS DONE.
DEMOBILIZED ONE OFFICE TRAILER AND
CONSOLIDATED WITH GEN INTO FINAL TRAILER.
WASTE MANAGEMENT PICKED UP ROLL-OFF AND
LEFT EMPTY ONE ONSITE.

PROJECT RECORD

DAILY QUALITY CONTROL REPORT
PAGE 2 OF 2

Date: 11/17/03

Material/Equipment Delivered (Identify Supplier and Quantity):

MARTIN MARRETTA - 4 LOADS #53 STONE

WASTE MANAGEMENT - 0-4 30 YD. ROLL-OFF

Results of Inspections (See Attached Inspection Report): S.E. IS COMPLETE.

ALL AGGREGATE IS PLACED.

Results of Testing (See Attached Testing Report): -NA-

Verbal Instructions and/or Comments: SENT WINGOVER AND CORRELAND

HOME EARLY DUE TO RAIN.

Remarks (Including Deficiencies/Corrective Actions): **PROJECT RECORD**

CERTIFICATION: I certify that the above report is complete and correct and that I, or my authorized representative, have inspected all work performed this day by the prime contractor and each subcontractor and have determined that all materials, equipment, and workmanship are in strict compliance with the plans and specifications except as may be noted above.

Scott Winters
Signature

11/17/03
Date

- Distribution: 1. Resident Superintendent
2. Independent CQA Officer

DAILY QUALITY CONTROL REPORT
PAGE 1 OF 2

ECC SITE
ZIONSVILLE, INDIANA
PROJECT NUMBER 2386

Date: 11/19/03

Weather: SUNNY 50 CLEAR BREEZE

Work Performed: CONTINUED LOADING OUT ROLL-OFFS
WITH PROCESS BLDG. DEBRIS AND ALSO LOADED
OUT BOILER SCRAP INTO HAZ-WASTE ROLL-OFFS.
ALL ROLL-OFFS FROM INSIDE RZ WERE DECONED
PRIOR TO LEAVING SITE.

REMOVED TRANSFORMERS FROM POLE IN RZ.
PLACED THEM ON DECON PAD. DECONED T-CELL
MANLIFT.

HOOSIER FENCE CONTINUED SETTING POSTS FOR
SZ SECURITY FENCE AND BEGAN PLACING TOP BRACE.

PROJECT RECORD

DAILY QUALITY CONTROL REPORT
PAGE 2 OF 2

Date: 11/18/93

Material/Equipment Delivered (Identify Supplier and Quantity):

ROLL-OFFS FROM WASTE MANAGEMENT / CHEM WASTE

Results of Inspections (See Attached Inspection Report): ALL FENCE POSTS

ARE SET.

Results of Testing (See Attached Testing Report):

NA -

Verbal Instructions and/or Comments: PSI WILL P/UP TRANSFORMERS

FOR DISPOSAL

PROJECT RECORD

Remarks (Including Deficiencies/Corrective Actions):

CERTIFICATION: I certify that the above report is complete and correct and that I, or my authorized representative, have inspected all work performed this day by the prime contractor and each subcontractor and have determined that all materials, equipment, and workmanship are in strict compliance with the plans and specifications except as may be noted above.

Signature [Handwritten Signature]

Date 11/18/93

- Distribution: 1. Resident Superintendent
2. Independent CQA Officer

DAILY QUALITY CONTROL REPORT
PAGE 1 OF 2

ECC SITE
ZIONSVILLE, INDIANA
PROJECT NUMBER 2396

Date: 11/19/03

Weather: RAIN 40 BRISK

Work Performed: COMPLETED SITE DEBRIS LOAD OUT AND
DECONED POLL-OFFS ~~THAT~~ THAT CAME OUT OF Remedial
ZONE. DECONED EQPT. ALSO DECONSTRUCTED
EXCLUSION ZONE FENCE AND PREPARED IT FOR DEMO.

HOOSIER FENCE CONTINUED CONSTRUCTION OF SUPPORT
ZONE SECURITY FENCE.

PROJECT RECORD

DAILY QUALITY CONTROL REPORT
PAGE 2 OF 2

Date: 11/19/93

Material/Equipment Delivered (Identify Supplier and Quantity):

WASTE MANAGEMENT - 1 4030 ROLL OFF

Results of Inspections (See Attached Inspection Report): - NA -

Results of Testing (See Attached Testing Report): - NA -

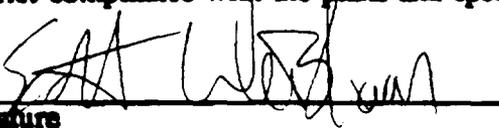
PROJECT RECORD

Verbal Instructions and/or Comments: - NA -

Remarks (Including Deficiencies/Corrective Actions): - NA -

CERTIFICATION: I certify that the above report is complete and correct and that I, or my authorized representative, have inspected all work performed this day by the prime contractor and each subcontractor and have determined that all materials, equipment, and workmanship are in strict compliance with the plans and specifications except as may be noted above.

Signature



Date

11/19/93

- Distribution:
1. Resident Superintendent
 2. Independent CQA Officer

DAILY QUALITY CONTROL REPORT
PAGE 1 OF 2

ECC SITE
ZIONSVILLE, INDIANA
PROJECT NUMBER 2326

Date: 11/22/93

Weather: 50 CLEAR LITE FREEZE

Work Performed: DECONTAMINATION OF HEAVY EQPT.
FOLLOWING THIS, STARTED CLEANING DECON PAD.

PROJECT RECORD

**DAILY QUALITY CONTROL REPORT
PAGE 2 OF 2**

Date: 11/22/93

Material/Equipment Delivered (Identify Supplier and Quantity):

Results of Inspections (See Attached Inspection Report): FENCING ALMOST

COMPLETE

Results of Testing (See Attached Testing Report): NA -

PROJECT RECORD

Verbal Instructions and/or Comments: NA -

Remarks (Including Deficiencies/Corrective Actions): _____

CERTIFICATION: I certify that the above report is complete and correct and that I, or my authorized representative, have inspected all work performed this day by the prime contractor and each subcontractor and have determined that all materials, equipment, and workmanship are in strict compliance with the plans and specifications except as may be noted above.

Signature



Date

11/22/93

- Distribution: 1. Resident Superintendent
2. Independent CQA Officer

DAILY QUALITY CONTROL REPORT
PAGE 1 OF 2

ECC SITE
ZIONSVILLE, INDIANA
PROJECT NUMBER 2376

Date: 11/23/93

Weather: 50 P. CLOUDY MILD BREEZE

Work Performed: DEMOBILIZATION. - LOADED PEZ FENCING AND
BLOCKS ON TRAILER. CLEANED DECON PAD AFTER DECON
OF FINAL ROLL-OFF.

HOOSIER FENCE - INSTALLED GATES ON SE
FENCE.

PROJECT RECORD

**DAILY QUALITY CONTROL REPORT
PAGE 2 OF 2**

Date: 11/23/93

Material/Equipment Delivered (Identify Supplier and Quantity):

Results of Inspections (See Attached Inspection Report): FENCE GATES INSTALLED

Results of Testing (See Attached Testing Report): RECEIVED APPROVAL

FOR BOILER

Verbal Instructions and/or Comments: _____

PROJECT RECORD

Remarks (Including Deficiencies/Corrective Actions): _____

CERTIFICATION: I certify that the above report is complete and correct and that I, or my authorized representative, have inspected all work performed this day by the prime contractor and each subcontractor and have determined that all materials, equipment, and workmanship are in strict compliance with the plans and specifications except as may be noted above.

Signature E. A. Weisbach

Date 11/23/93

- Distribution: 1. Resident Superintendent
2. Independent CQA Officer

DAILY QUALITY CONTROL REPORT
PAGE 1 OF 2

ECC SITE
ZIONSVILLE, INDIANA
PROJECT NUMBER 2396

Date: 11/20/03

Weather: OVERCAST 50

Work Performed: DECOMMISSIONED DECON PAD AND
CONTINUED SITE DEMOB. MOVED REMAINING DRUMS
TO CONCRETE PAD.

HOOSIER FENCE - COMPLETE FENCE SET UP. ALL
THAT REMAINS IS LOCK/LATCHES.

PROJECT RECORD

**DAILY QUALITY CONTROL REPORT
PAGE 2 OF 2**

Date: 11/24/93

Material/Equipment Delivered (Identify Supplier and Quantity):

Results of Inspections (See Attached Inspection Report):

Results of Testing (See Attached Testing Report):

Verbal Instructions and/or Comments:

Remarks (Including Deficiencies/Corrective Actions):

PROJECT RECORD

CERTIFICATION: I certify that the above report is complete and correct and that I, or my authorized representative, have inspected all work performed this day by the prime contractor and each subcontractor and have determined that all materials, equipment, and workmanship are in strict compliance with the plans and specifications except as may be noted above.

Edith Wetzman
Signature

11/24/93
Date

- Distribution: 1. Resident Superintendent
2. Independent CQA Officer

DAILY QUALITY CONTROL REPORT
PAGE 1 OF 2

ECC SITE
ZIONSVILLE, INDIANA
PROJECT NUMBER 2396

Date: 11/29/53

Weather: OVERCAST 35° WINDY

Work Performed: DECON PAD SUMP REPAIR -
PUT PRIMER COAT ON. PLACED STRAW
BALES BY TRENCHES FOR EROSION.

PROJECT RECORD

DAILY QUALITY CONTROL REPORT
PAGE 2 OF 2

Date: 11/29/93

Material/Equipment Delivered (Identify Supplier and Quantity):

RESCO REMOVED LOADER AND EXCAVATOR

Results of Inspections (See Attached Inspection Report):

Results of Testing (See Attached Testing Report):

Verbal Instructions and/or Comments:

PROJECT RECORD

Remarks (Including Deficiencies/Corrective Actions):

CERTIFICATION: I certify that the above report is complete and correct and that I, or my authorized representative, have inspected all work performed this day by the prime contractor and each subcontractor and have determined that all materials, equipment, and workmanship are in strict compliance with the plans and specifications except as may be noted above.

[Signature]
Signature

11/29/93
Date

- Distribution:
1. Resident Superintendent
 2. Independent CQA Officer

DAILY QUALITY CONTROL REPORT
PAGE 1 OF 2

ECC SITE
ZIONSVILLE, INDIANA
PROJECT NUMBER 2396

Date: 11/30/95

Weather: ~~DRIZZLE~~ MOSTLY CLOUDY 35°
BREEZE

Work Performed: PUMPED WW INTO TRUCK/TANK
FOR OFFSITE DISPOSAL. PUMPED EXCESS
RAIN WATER OFF WW STORAGE PAD & OUT
OF DECON PAD SUMP. CONTINUED REPAIR
OF DECON PAD SUMP. PLACED SILT FENCE
ALONG TOE OF NORTH DITCH. PLACED STRAW
BALES IN REMAINING DITCHES FOR FROST
CONTROL. DRAINED REMAINING CLEAN WATER INTO
DITCH.
HOOSIER FENCE - INSTALLED FENCE GATE LOCKS/
LATCHES.

PROJECT RECORD

DAILY QUALITY CONTROL REPORT
PAGE 2 OF 2

Date: 11/30/93

Material/Equipment Delivered (Identify Supplier and Quantity):

~~CLEAN HARBORS~~ - REMOVED ~~27,500~~ gal w/ FROM FEAC
TANK. GE MOBILE REMOVED TRAILER.

Results of Inspections (See Attached Inspection Report): SILT FENCE

~~INSTALL~~ INSTALLED FOR EROSION CONTROL

Results of Testing (See Attached Testing Report): SILT FENCE

COMPLIES w/ T.S. 2700.2.01.A

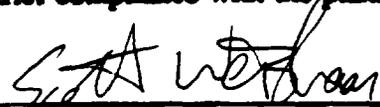
Verbal Instructions and/or Comments:

PROJECT RECORD

Remarks (Including Deficiencies/Corrective Actions):

CERTIFICATION: I certify that the above report is complete and correct and that I, or my authorized representative, have inspected all work performed this day by the prime contractor and each subcontractor and have determined that all materials, equipment, and workmanship are in strict compliance with the plans and specifications except as may be noted above.

Signature



Date

11/30/93

- Distribution: 1. Resident Superintendent
2. Independent CQA Officer

RESIDENT SUPERINTENDENT'S DAILY REPORT

ECC SITE
 ZIONSVILLE, INDIANA
 PROJECT NUMBER 2396
 REPORT NUMBER 001

Date: 8-30-93

PROJECT RECORD

Day	S	(M)	T	W	TH	F	S
WEATHER	Bright Sun	Clear	Overcast	Rain	Snow		
TEMP.	To 32	32-50	50-70	70-85	85 up		
WIND	Still	Moder	High	Report No.			
HUMIDITY	Dry	(Moder)	Humid	001			

Average Field Force			
Name of Contractor	Non-manual	Manual	Remarks
AWD Technologies, Inc.	2	2	
MSE SURVEYING	0	2	
Visitors			
Time	Representing	Representing	Remarks
1:00 PM	DICK ETCHISON SMOCK ASSOC.		

Equipment at the Site: Track Loader

Construction Activities: Surveyor staking out fence lines and remedial boundary line. AWD began moving tanks that were staged in support zone. Tanks moved inside remedial boundary line so that support zone work can commence. Approximately 26 tanks moved. Also moved mulch pile near contractor parking area.

By: J R [Signature] Title: Resident Superintendent

- Distribution:
1. Independent CQA Officer
 2. ECC Trust's Engineer
 3. Site File

RESIDENT SUPERINTENDENT'S DAILY REPORT

**ECC SITE
ZIONSVILLE, INDIANA**
PROJECT NUMBER 2396
REPORT NUMBER 002

Date: 8-31-93

Day	S	M	(T)	W	TH	F	S
-----	---	---	-----	---	----	---	---

WEATHER	Bright Sun	Clear	(Overcast)	(Rain)	Snow
TEMP.	To 32	32-50	50-70	(70-85)	85 up
WIND	Still	(Moder)	High	Report No.	
HUMIDITY	Dry	(Moder)	Humid	002	

Average Field Force			
Name of Contractor <i>AWD Technologies, Inc.</i>	Non-manual <i>2</i>	Manual <i>2</i>	Remarks
Visitors			
Time	Representing	Representing	Remarks

Equipment at the Site: Track Loader

Construction Activities: Prepared for A-Frame demolition - discrepancies between May, 1992 and December, 1992 Technical Specifications. Performed sampling of Process Building and delivered to Heritage Laboratories for analysis.

S. Weishaar stepped on nail - went to emergency room - cleared to return to work.

By: J.R. Fife Title: Resident Superintendent

- Distribution:
1. Independent CQA Officer
 2. ECC Trust's Engineer
 3. Site File

PROJECT RECORD

RESIDENT SUPERINTENDENT'S DAILY REPORT

ECC SITE
ZIONSVILLE, INDIANA
PROJECT NUMBER 2396
REPORT NUMBER 003

Date: 9-1-93

Day	S	M	T	W	TH	F	S
-----	---	---	---	---	----	---	---

WEATHER	Bright Sun	Clear	Overcast	Rain	Snow
TEMP.	To 32	32-50	50-70	(70-85)	85 up
WIND	Still	(Moder)	High	Report No.	
HUMIDITY	Dry	(Moder)	Humid	003	

Average Field Force			
Name of Contractor <i>AWD Technologies, Inc.</i>	Non-manual <i>2</i>	Manual <i>3 2</i>	Remarks
Visitors			
Time	Representing	Representing	Remarks

Equipment at the Site: Track Loader

Construction Activities: Reviewed drawings/specs. with Tim Harrison (CH2M HILL - USEPA oversight). Pickup supplies. Setup mini-decon area. Organize office.

By: *J.R. Frip* Title: Resident Superintendent

- Distribution:
1. Independent CQA Officer
 2. ECC Trust's Engineer
 3. Site File

PROJECT RECORD

RESIDENT SUPERINTENDENT'S DAILY REPORT

**ECC SITE
ZIONSVILLE, INDIANA**
PROJECT NUMBER 2396
REPORT NUMBER 004

Date: 9-2-93

Day

S	M	T	W	TH	F	S
---	---	---	---	----	---	---

WEATHER	Bright Sun	Clear	Overcast	Rain	Snow
TEMP.	To 32	32-50	50-70	70-85	85 up
WIND	Still	Moder	High	Report No.	
HUMIDITY	Dry	Moder	Humid	004	

Average Field Force			
Name of Contractor <i>AWD Technologies, Inc.</i>	Non-manual <i>2</i>	Manual <i>3 2</i>	Remarks
Visitors			
Time <i>7:30-8:00</i>	Representing <i>John Mitchell Smock Assoc.</i>	Representing	Remarks

Equipment at the Site: Track Loader

Construction Activities: Pack-out A-Frame (Level C). Found potentially leaking drum of unknown contents. Inspect top floor of A-Frame House. Grade surface at southern end of support zone. Found 12" sewage line.

Unresolved burden of cost for handling potentially leaking drum. Unresolved Dec., 1992 documents vs. May, 1993 documents.

By: *J.R. Fife* Title: Resident Superintendent

- Distribution:
1. Independent CQA Officer
 2. ECC Trust's Engineer
 3. Site File

PROJECT RECORD

RESIDENT SUPERINTENDENT'S DAILY REPORT

**ECC SITE
ZIONSVILLE, INDIANA**
PROJECT NUMBER 2396
REPORT NUMBER 005

Date: 9-3-93

Day	S	M	T	W	TH	F	S
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WEATHER	Bright Sun	Clear	Overcast	Rain	Snow
TEMP.	To 32	32-50	50-70	70-85	85 up
WIND	Still	Moder	High	Report No.	
HUMIDITY	Dry	Moder	Humid	005	

Average Field Force			
Name of Contractor	Non-manual	Manual	Remarks
AWD Technologies, Inc.	2	2	
MSE Surveying	0	2	
Visitors			
Time	Representing	Representing	Remarks

Equipment at the Site: Track Loader, SCBA, PPE

Construction Activities: Surveyor continues grade setting grades for grading. B. Autio, REM informed me Heritage stopped by and they need additional material for wood and styrofoam samples. S. Weishaar and T. Castor enter A-Frame House in Level B PPE to handle potentially leaking drum. Job incomplete at end of day. Will continue next week.

By: J.R. [Signature] Title: Resident Superintendent

- Distribution:
1. Independent CQA Officer
 2. ECC Trust's Engineer
 3. Site File

PROJECT RECORD

RESIDENT SUPERINTENDENT'S DAILY REPORT

ECC SITE
 ZIONSVILLE, INDIANA
 PROJECT NUMBER 2396
 REPORT NUMBER 006

Date: 9-7-93

Day S M **T** W TH F S

WEATHER	Bright Sun	Clear	Overcast	Rain	Snow
TEMP.	To 32	32-50	50-70	(70-85)	85 up
WIND	Still	Moder	High	Report No.	
HUMIDITY	Dry	Moder	Humid	006	

Average Field Force			
Name of Contractor	Non-manual	Manual	Remarks
AWD Technologies, Inc.	2	3 3	R. Logeland started to day.
MSE Surveying	0	2	

Visitors			
Time	Representing	Representing	Remarks

Equipment at the Site: Track Loader, SCBA, PPE

Construction Activities: Continue Level B work in A-Frame to handle potentially leaking drum. Finished A-Frame overpack of drum at 9:15 am. Additional sampling in process bldg. per Heritage's request for more sample material. Gave samples to Heritage for analysis. Began grading for decan pad to subgrade elevations. Remaining part of A-Frame House contents performed. Fence placed around decan pad.

By: JR [Signature] Title: Resident Superintendent

- Distribution:
1. Independent CQA Officer
 2. ECC Trust's Engineer
 3. Site File

PROJECT RECORD

RESIDENT SUPERINTENDENT'S DAILY REPORT

ECC SITE
ZIONSVILLE, INDIANA
PROJECT NUMBER 2396
REPORT NUMBER 007

Date: 9-8-93

Day	S	M	T	W	TH	F	S
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WEATHER	Bright Sun	Clear	Overcast	Rain	Snow
TEMP.	To 32	32-50	50-70	70-85	85 up
WIND	Still	Moder	High	Report No.	
HUMIDITY	Dry	Moder	Humid	<u>007</u>	

Average Field Force			
Name of Contractor <i>AWA Technologies, Inc.</i>	Non-manual <u>2</u>	Manual <u>3</u>	Remarks
Visitors			
Time	Representing	Representing	Remarks

Equipment at the Site: Track Loader, Auger

Construction Activities: Resumed grading of decon pad. Continued drum pack out of A-Frame House. Finished A-Frame pack out. Start setting construction fence posts but fail by hand methods. B. Auto, S. Weishaar sample decon pad area soils. Pickup auger for post holes. Auger returned to rental company - not successful in setting construction fence posts.

By: J. R. [Signature] Title: Resident Superintendent

- Distribution:
1. Independent CQA Officer
 2. ECC Trust's Engineer
 3. Site File

PROJECT RECORD

RESIDENT SUPERINTENDENT'S DAILY REPORT

ECC SITE
ZIONSVILLE, INDIANA
PROJECT NUMBER 2396
REPORT NUMBER 008

Date: 9-9-93

Day

S	M	T	W	TH	F	S
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WEATHER	Bright Sun	Clear	Overcast	Rain	Snow
TEMP.	To 32	32-50	50-70	70-85	85 up
WIND	Still	Moder	High	Report No.	
HUMIDITY	Dry	Moder	Humid	008	

Average Field Force			
Name of Contractor	Non-manual	Manual	Remarks
<i>AWD Technologies, Inc.</i>	<i>2</i>	<i>3</i>	
Visitors			
Time	Representing	Representing	Remarks

Equipment at the Site: Track loader, Rock Hammer

Construction Activities: Pickup Rock hammer for fence post installation. Continue grading decon pad area. Concrete submittals to B. Autio / V. Oster. Asked them to expedite concrete subcontractor submittals. Received approval for 3 changes between documents verbally (monitoring well protective barriers, diversion channel alignment per May documents, no aggregate around A-frame House). Began fence post installation with rock hammer and compressor. Finished subgrade for decon pad. Rough grading of contractor laydown area.

By: *J. R. [Signature]* Title: Resident Superintendent

- Distribution:
1. Independent CQA Officer
 2. ECC Trust's Engineer
 3. Site File

PROJECT RECORD

RESIDENT SUPERINTENDENT'S DAILY REPORT

**ECC SITE
ZIONSVILLE, INDIANA**
PROJECT NUMBER 2396
REPORT NUMBER 009

Date: 9-10-93

Day	S	M	T	W	TH	F	S
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WEATHER	Bright Sun	Clear	Overcast	Rain	Snow
TEMP.	To 32	32-50	50-70	70-85	85 up
WIND	Still	Moder	High	Report No.	
HUMIDITY	Dry	Moder	Humid	009	

Average Field Force			
Name of Contractor	Non-manual	Manual	Remarks
<i>AWO Technologies, Inc.</i>	2	3	
<i>MSE Surveying</i>	0	2	
Visitors			
Time	Representing	Representing	Remarks

Equipment at the Site: Track Loader

Construction Activities: Continued work on construction fence. Started clearing around A-Frame House. started making boundaries and zone lines. Moved drummed material from A-frame to inside remedial boundary line.

By: *J. R. [Signature]* Title: Resident Superintendent

- Distribution:
1. Independent CQA Officer
 2. ECC Trust's Engineer
 3. Site File

PROJECT RECORD

RESIDENT SUPERINTENDENT'S DAILY REPORT

ECC SITE
ZIONSVILLE, INDIANA
PROJECT NUMBER 2396
REPORT NUMBER 010

Date: 9-13-93

Day

S	M	T	W	TH	F	S
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WEATHER	Bright Sun	Clear	Overcast	(Rain)	Snow
TEMP.	To 32	32-50	50-70	(70-85)	85 up
WIND	Still	(Moder)	High	Report No.	
HUMIDITY	Dry	(Moder)	Humid	010	

Average Field Force			
Name of Contractor	Non-manual	Manual	Remarks
AWD Technologies Inc.	2	3	
MSE Surveying	0	2	
Visitors			
Time	Representing	Representing	Remarks

Equipment at the Site: Track Loader

Construction Activities: start fence removal of existing fence - Prepare for geotextile placement. Mark remedial boundary with "Danger Tape". Relocate Tanks as needed to mark remedial boundary line. Continue site grading. 22 rolls geotextile arrives. Regrade decon pad per Saverio DeBartolo. Cover geotextile.

By: JR Faj Title: Resident Superintendent

- Distribution:
1. Independent CQA Officer
 2. ECC Trust's Engineer
 3. Site File

PROJECT RECORD

RESIDENT SUPERINTENDENT'S DAILY REPORT

**ECC SITE
ZIONSVILLE, INDIANA**
PROJECT NUMBER 2396
REPORT NUMBER 011

Date: 9-14-93

Day	S	M	T	W	TH	F	S
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WEATHER	Bright Sun	Clear	Overcast	Rain	Snow
TEMP.	To 32	32-50	50-70	70-85	85 up
WIND	Still	Moder	High	Report No.	
HUMIDITY	Dry	Moder	Humid	011	

Average Field Force			
Name of Contractor <i>AWD Technologies Inc.</i>	Non-manual <i>2</i>	Manual <i>3</i>	Remarks
Visitors			
Time <i>8:00 am</i>	Representing <i>J. Mitchell Smock Assoc.</i>	Representing	Remarks

Equipment at the Site: Track Loader

Construction Activities: Rough grade NW area of support zone including redistribution of stockpile. Check grade stakes. Place northeast corner fence. Reestablish subgrade and corner posts for decan pad.

By: J R Jip Title: Resident Superintendent

- Distribution:
1. Independent CQA Officer
 2. ECC Trust's Engineer
 3. Site File

PROJECT RECORD

RESIDENT SUPERINTENDENT'S DAILY REPORT

**ECC SITE
ZIONSVILLE, INDIANA**
PROJECT NUMBER 2396
REPORT NUMBER 012

Date: 9-15-93

Day	S	M	T	W	TH	F	S
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WEATHER	Bright Sun	Clear	Overcast	Rain	Snow
TEMP.	To 32	32-50	50-70	70-85	85 up
WIND	Still	Moder	High	Report No.	
HUMIDITY	Dry	Moder	Humid	012	

Average Field Force			
Name of Contractor <i>AWO Technologies, Inc.</i>	Non-manual <i>3</i>	Manual <i>3</i>	Remarks
Visitors			
Time	Representing	Representing	Remarks

Equipment at the Site: Track Loader

Construction Activities: S. Weishaar and me check grade stakes for M. Dowiak to compare to designed elevations. Appears existing grades are higher than those shown on design drawings. Too wet to work today. J. Ambrose arrives to support construction submittals.

By: *JL [Signature]* Title: Resident Superintendent

- Distribution:
1. Independent CQA Officer
 2. ECC Trust's Engineer
 3. Site File

PROJECT RECORD

RESIDENT SUPERINTENDENT'S DAILY REPORT

**ECC SITE
ZIONSVILLE, INDIANA**
PROJECT NUMBER 2396
REPORT NUMBER 013

Date: 9-16-93

Day	S	M	T	W	TH	F	S
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WEATHER	Bright Sun	Clear	Overcast	Rain	Snow
TEMP.	To 32	32-50	50-70	70-85	85 up
WIND	Still	Moder	High	Report No.	
HUMIDITY	Dry	Moder	Humid	013	

Average Field Force			
Name of Contractor	Non-manual	Manual	Remarks
AWD Technologies, Inc.	3	3	
MSE SURVEYING	0	2	

Visitors			
Time	Representing	Representing	Remarks
7:00am	K. Vendl, U.S. EPA		

Equipment at the Site: Track loader

Construction Activities: Continue regrading support zone area. Tour site with K. Vendl U.S. EPA. J. Ambrose and B. Autio, QEM discuss submittals. Fed Ex geotextile sample to geotechnical laboratory for conformance testing.

By: J. R. Fish Title: Resident Superintendent

- Distribution:
1. Independent CQA Officer
 2. ECC Trust's Engineer
 3. Site File

PROJECT RECORD

RESIDENT SUPERINTENDENT'S DAILY REPORT

**ECC SITE
ZIONSVILLE, INDIANA**
PROJECT NUMBER 2396
REPORT NUMBER 014

Date: 9-17-93

Day	S	M	T	W	TH	<u>F</u>	S
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WEATHER	Bright Sun	Clear	<u>Overcast</u>	Rain	Snow
TEMP.	To 32	32-50	50-70	<u>70-85</u>	85 up
WIND	Still	<u>Moder</u>	High	Report No.	
HUMIDITY	Dry	<u>Moder</u>	Humid	<u>014</u>	

Average Field Force			
Name of Contractor <i>AWD Technologies Inc.</i>	Non-manual <i>3</i>	Manual <i>3</i>	Remarks
Visitors			
Time <i>7:00 am</i>	Representing <i>K. Vondt U.S. EPA</i>	Representing	Remarks

Equipment at the Site: Track Loader

Construction Activities: Continue grading support zone - S. Weishaar checking grade stakes. T. Castor maintaining grade stakes.

By: *J. A. [Signature]* **Title:** Resident Superintendent

- Distribution:**
1. Independent CQA Officer
 2. ECC Trust's Engineer
 3. Site File

PROJECT RECORD

RESIDENT SUPERINTENDENT'S DAILY REPORT

**ECC SITE
ZIONSVILLE, INDIANA**
PROJECT NUMBER 2396
REPORT NUMBER 015

Date: 9-20-93

Day

S	M	T	W	TH	F	S
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WEATHER	Bright Sun	Clear	Overcast	Rain	Snow
TEMP.	To 32	32-50	50-70	70-85	85 up
WIND	Still	Moder	High	Report No.	
HUMIDITY	Dry	Moder	Humid	015	

Average Field Force			
Name of Contractor	Non-manual	Manual	Remarks
AWD Technologies, Inc.	3	3 2	
MSE Surveying	0	2	

Visitors			
Time	Representing	Representing	Remarks

Equipment at the Site: Track Loader

Construction Activities: Surveyor placing grade stakes with S. Weishaar. Continue fine grading of support zone. Phone conference call w/ Trustees, REM, ERM, AWD on job status. Start to establish grade at 2% with crown. Crown sloping south at 2% and north at 2%. Also slopes from ~~west to east~~ east west to east.

By: J.R. [Signature] Title: Resident Superintendent

- Distribution:
1. Independent CQA Officer
 2. ECC Trust's Engineer
 3. Site File

PROJECT RECORD

RESIDENT SUPERINTENDENT'S DAILY REPORT

**ECC SITE
ZIONSVILLE, INDIANA**
PROJECT NUMBER 2396
REPORT NUMBER 016

Date: 9-21-93

Day

S	M	T	W	TH	F	S
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WEATHER	Bright Sun	Clear	Overcast	Rain	Snow
TEMP.	To 32	32-50	50-70	70-85	85 up
WIND	Still	Moder	High	Report No.	
HUMIDITY	Dry	Moder	Humid	016	

Average Field Force			
Name of Contractor	Non-manual	Manual	Remarks
AWO Technologies, Inc.	3	3	Decon Pad Sub.
Smock Associates	0	3	
Visitors			
Time	Representing	Representing	Remarks

Equipment at the Site: Track Loader

Construction Activities: Smock begins work on footings for decon pad. AWO sets baselines for grade checks.
C. Timber (EMAS) and Chem Waste Mgmt. onsite for non-haz waste "special waste"

By: JR Tife Title: Resident Superintendent

- Distribution:
1. Independent CQA Officer
 2. ECC Trust's Engineer
 3. Site File

PROJECT RECORD

RESIDENT SUPERINTENDENT'S DAILY REPORT

ECC SITE
 ZIONSVILLE, INDIANA
 PROJECT NUMBER 2396
 REPORT NUMBER 017

Date: 9-22-93

Day	S	M	T	W	TH	F	S
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WEATHER	Bright Sun	Clear	Overcast	Rain	Snow
TEMP.	To 32	32-50	50-70	70-85	85 up
WIND	Still	Moder	High	Report No.	
HUMIDITY	Dry	Moder	Humid	<u>017</u>	

Average Field Force			
Name of Contractor	Non-manual	Manual	Remarks
<i>AWD Technologies, Inc.</i>	3	3	
<i>Smock Associates</i>	0	3	<i>Decon Pad Sub</i>

Visitors			
Time	Representing	Representing	Remarks

Equipment at the Site: Track Loader

Construction Activities: Final grading at north end of support zone. S. Weishaar/T. Castor setting grade stakes at south end of support zone. Finished grading of site - ordered No. 2 stone. placed 3 rolls of geotextile. 20 loads of stone placed.

Smock Assoc. performing formwork for decon pad.

By: *J. M. [Signature]* Title: Resident Superintendent

- Distribution:
1. Independent CQA Officer
 2. ECC Trust's Engineer
 3. Site File

PROJECT RECORD

RESIDENT SUPERINTENDENT'S DAILY REPORT

**ECC SITE
ZIONSVILLE, INDIANA**
PROJECT NUMBER 2396
REPORT NUMBER 018

Date: 9-23-93

Day S M T W **TH** F S

WEATHER	Bright Sun	Clear	Overcast	Rain	Snow
TEMP.	To 32	32-50	50-70	70-85	85 up
WIND	Still	Moder	High	Report No.	
HUMIDITY	Dry	Moder	Humid	<u>018</u>	

Average Field Force			
Name of Contractor	Non-manual	Manual	Remarks
<u>AWD Technologies, Inc.</u>	<u>3</u>	<u>3</u>	
<u>Smock and Assoc.</u>	<u>0</u>	<u>3</u>	<u>Decon Pad Sub.</u>

Visitors			
Time	Representing	Representing	Remarks

Equipment at the Site: Track Loader

Construction Activities: Continue regrading north end of support zone. Continued placing stone all day in support zone.

Smock and Associates continue to work on concrete decon pad.

By: J.R. Jiff Title: Resident Superintendent

- Distribution:
1. Independent CQA Officer
 2. ECC Trust's Engineer
 3. Site File

PROJECT RECORD

RESIDENT SUPERINTENDENT'S DAILY REPORT

ECC SITE
ZIONSVILLE, INDIANA
PROJECT NUMBER 2396
REPORT NUMBER 019

Date: 9-24-93

Day	S	M	T	W	TH	F	S
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WEATHER	Bright Sun	Clear	Overcast	Rain	Snow
TEMP.	To 32	32-50	50-70	70-85	85 up
WIND	Still	Moder	High	Report No.	
HUMIDITY	Dry	Moder	Humid	<u>019</u>	

Average Field Force			
Name of Contractor	Non-manual	Manual	Remarks
AWD Technologies, Inc.	3	3	Decon Pad Sub
Smock and Associates	0	3	
Visitors			
Time	Representing	Representing	Remarks

Equipment at the Site: Track Loader, Compactor Roller

Construction Activities: Reopen South Ditch. Continue stone placement checking depth of No. 2 Stone. Compactor Roller arrives onsite. Compact No. 2 stone with roller.

Smock Assoc. continues formwork for decon pad.

By: *J.R. [Signature]* Title: Resident Superintendent

- Distribution:
1. Independent CQA Officer
 2. ECC Trust's Engineer
 3. Site File

PROJECT RECORD

RESIDENT SUPERINTENDENT'S DAILY REPORT

**ECC SITE
ZIONSVILLE, INDIANA**
PROJECT NUMBER 2396
REPORT NUMBER 020

Date: 9-27-93

Day	S	M	T	W	TH	F	S
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WEATHER	Bright Sun	Clear	Overcast	Rain	Snow
TEMP.	To 32	32-50	50-70	70-85	85 up
WIND	Still	Moder	High	Report No.	
HUMIDITY	Dry	Moder	Humid	020	

Average Field Force			
Name of Contractor	Non-manual	Manual	Remarks
AWO Technologies, Inc Smock and Assoc.	2 0	3 3	Decon Pad Sub

Visitors			
Time	Representing	Representing	Remarks

Equipment at the Site: Track Loader

Construction Activities: 30 Loads of No. 53 stone ordered and placed in support zone area.

Smock and Assoc. excavated pit for manhole placement
S. Weishaar checks soil with PID.

By: J.R. Fife Title: Resident Superintendent

- Distribution:
1. Independent CQA Officer
 2. ECC Trust's Engineer
 3. Site File

PROJECT RECORD

RESIDENT SUPERINTENDENT'S DAILY REPORT

**ECC SITE
ZIONSVILLE, INDIANA**
PROJECT NUMBER 2396
REPORT NUMBER 021

Date: 9-28-93

Day	S	M	T	W	TH	F	S
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WEATHER	Bright Sun	Clear	Overcast	Rain	Snow
TEMP.	To 32	32-50	50-70	70-85	85 up
WIND	Still	Moder	High	Report No.	
HUMIDITY	Dry	Moder	Humid	021	

Average Field Force			
Name of Contractor	Non-manual	Manual	Remarks
AWD technologies, Inc.	2	3	Decon Pad Sub
Smuck and Associates	0	3	
Visitors			
Time	Representing	Representing	Remarks

Equipment at the Site: Track Loader , PC150 Excavator

Construction Activities: AWD continues placing and compacting stone in the support zone. Started excavating the southwest trench diversion channel. Water encountered during diversion channel excavation. Scott Weishaar and T. Castor checked invert elevations. PSI placed power pole (2nd) in preparation for running power. Rubble "uncommon in nature" encountered during ditch diversion channel work. Smuck & Assoc. placed manhole and levelled and prepared for pipe placement.

By: J. A. Jeps Title: Resident Superintendent

- Distribution:
1. Independent CQA Officer
 2. ECC Trust's Engineer
 3. Site File

PROJECT RECORD

RESIDENT SUPERINTENDENT'S DAILY REPORT

ECC SITE
ZIONSVILLE, INDIANA
PROJECT NUMBER 2396
REPORT NUMBER 022

Date: 9-29-93

Day S M T **W** TH F S

WEATHER	Bright Sun	Clear	Overcast	Rain	Snow
TEMP.	To 32	32-50	50-70	70-85	85 up
WIND	Still	Moder	High	Report No.	
HUMIDITY	Dry	Moder	Humid	022	

Average Field Force			
Name of Contractor	Non-manual	Manual	Remarks
AWD Technologies Inc. Smock & Associates	2 0	1 3 3	Decon pad sub
Visitors			
Time	Representing	Representing	Remarks

Equipment at the Site: Track Loader, Roller Compactor

Construction Activities: Continued excavation of Southwest Diversion Channel. Large debris including concrete rubble - large pieces encountered. Started SouthEast Diversion channel at old A-Frame House location. Large rubble hampers progress. Start construction fence repairs. Start to upgrade laydown area.

By: J. R. [Signature] Title: Resident Superintendent

- Distribution:
1. Independent CQA Officer
 2. ECC Trust's Engineer
 3. Site File

PROJECT RECORD

RESIDENT SUPERINTENDENT'S DAILY REPORT

ECC SITE
ZIONSVILLE, INDIANA
PROJECT NUMBER 2396
REPORT NUMBER 023

Date: 9-30-93

Day S M T W **TH** F S

WEATHER	Bright Sun	Clear	Overcast	Rain	Snow
TEMP.	To 32	32-50	50-70	70-85	85 up
WIND	Still	Moder	High	Report No.	
HUMIDITY	Dry	Moder	Humid	023	

Average Field Force			
Name of Contractor	Non-manual	Manual	Remarks
AND Technologies, Inc.	2	4	RECON pad sub
Smock & Associates	0	3	
Visitors			
Time	Representing	Representing	Remarks

Equipment at the Site: Track loader

Construction Activities: Start Northeast Diversion Channel - west of concrete slab. Move debris pile to extreme southeast corner of work area. Receive 12' x 60' trailer. Start finish grade on south support zone area. 5. Weir shaft C&C on No. 53 cover stone. Discussed moving valve to inside manhole with AND App. design group. Finish NE diversion channel. Received 10' x 48' trailer. Finished SE ditch to intersect with SW ditch. 2 loads of stone placed in SE and SW ditches.

By: J.R. Sep Title: Resident Superintendent

- Distribution:
1. Independent CQA Officer
 2. ECC Trust's Engineer
 3. Site File

PROJECT RECORD

RESIDENT SUPERINTENDENT'S DAILY REPORT

**ECC SITE
ZIONSVILLE, INDIANA**
PROJECT NUMBER 2396
REPORT NUMBER 024

Date: 10-01-93

Day

S	M	T	W	TH	F	S
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WEATHER	Bright Sun	Clear	Overcast	Rain	Snow
TEMP.	To 32	32-50	50-70	70-85	85 up
WIND	Still	Moder	High	Report No.	
HUMIDITY	Dry	Moder	Humid	024	

Average Field Force			
Name of Contractor	Non-manual	Manual	Remarks
AWD Technologies Inc.	2	4	Decon Pad Sub
Smock and Assoc.	0	4	
Visitors			
Time	Representing	Representing	Remarks

Equipment at the Site: Track Excavator Loader

Construction Activities: Smock and Assoc. start decon pad curb pouring concrete using crane and bucket. Midwest Testing took slump, air, and concrete cylinders. Proceeded with stone placement in the contractor laydown area including final grading and geotextile.

Smock completed decon pad pour of curb and started finishing it. Smock crew did work inside manhole.

By: JR [Signature] Title: Resident Superintendent

- Distribution:
1. Independent CQA Officer
 2. ECC Trust's Engineer
 3. Site File

PROJECT RECORD

RESIDENT SUPERINTENDENT'S DAILY REPORT

**ECC SITE
ZIONSVILLE, INDIANA**
PROJECT NUMBER 2396
REPORT NUMBER 025

Date: 10-04-93

Day	S	M	T	W	TH	F	S
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WEATHER	Bright Sun	Clear	Overcast	Rain	Snow
TEMP.	To 32	32-50	50-70	70-85	85 up
WIND	Still	Moder	High	Report No.	
HUMIDITY	Dry	Moder	Humid	025	

Average Field Force			
Name of Contractor	Non-manual	Manual	Remarks
AWD Technologies, Inc.	4	4	Decon Pad Sub
Smock and Assoc.	0	5	
Visitors			
Time	Representing	Representing	Remarks
7:10 am	John Harris AWD / CRC Audit		

Equipment at the Site: Track Loader, PC150 Removed Sat./Sun. by Resco

Construction Activities: Smock and Associates stripping formwork - very difficult. AWD spreading stone in access road upgrade area, including geotextile placement and proper compaction.

Smock Assoc. has keyway which needed patched on east curb wall. Smock to use Durabond to patch keyway with.

Bob Avtio, EM mentioned possible re-routing of Parcel 45 Diversion Channel outfall.

By: J. A. [Signature] Title: Resident Superintendent

- Distribution:
1. Independent CQA Officer
 2. ECC Trust's Engineer
 3. Site File

PROJECT RECORD

RESIDENT SUPERINTENDENT'S DAILY REPORT

**ECC SITE
ZIONSVILLE, INDIANA**
PROJECT NUMBER 2396
REPORT NUMBER 026

Date: 10/5/93

Day	S	M	T	W	TH	F	S
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WEATHER	Bright Sun	Clear	Overcast	Rain	Snow
TEMP.	To 32	32-50	50-70	70-85	85 up
WIND	Still	Moder	High	Report No.	
HUMIDITY	Dry	Moder	Humid	026	

Average Field Force			
Name of Contractor	Non-manual	Manual	Remarks
AWD Technologies, Inc.	4	4	Decan Pad Sub.
Smock & Assoc.	0	5	
Visitors			
Time	Representing	Representing	Remarks
7:30 AM	J. Harris AWD / CQC Audit		

Equipment at the Site: Track Loader, Track Excavator

Construction Activities: grading contractor parking area to prepare for stone placement. Spredd #2 stone in access road upgrade area and contractor parking area.

Smock and Assoc. continues removing forms. Smock stone arrives for beneath slab.

Reinforced Concrete pipe delivered today also.

By: J. A. P. Title: Resident Superintendent

- Distribution:
1. Independent CQA Officer
 2. ECC Trust's Engineer
 3. Site File

PROJECT RECORD

RESIDENT SUPERINTENDENT'S DAILY REPORT

**ECC SITE
ZIONSVILLE, INDIANA**
PROJECT NUMBER 2396
REPORT NUMBER 027

Date: 10-6-93

Day	S	M	T	W	TH	F	S
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WEATHER	Bright Sun	Clear	Overcast	Rain	Snow
TEMP.	To 32	32-50	50-70	70-85	85 up
WIND	Still	Moder	High	Report No.	
HUMIDITY	Dry	Moder	Humid	027	

Average Field Force			
Name of Contractor	Non-manual	Manual	Remarks
<i>AWD Technologies, Inc.</i>	<i>3</i>	<i>4</i>	<i>Decon Pad Sub</i>
<i>Smock and Assoc.</i>	<i>0</i>	<i>3</i>	
Visitors			
Time	Representing	Representing	Remarks

Equipment at the Site: _____

Construction Activities: *AWD began excavation of NW Diversion Channel / Finished grading access road & upgrade area and contractor parking area. Placed maingate culvert pipe. Placed SW and SE Diversion Channel connector culvert pipe.*

Smock and Assoc. placed stone in the decon pad and started formwork for slab sections.

By: *J. A. [Signature]* Title: *Resident Superintendent*

- Distribution:
1. Independent CQA Officer
 2. ECC Trust's Engineer
 3. Site File

PROJECT RECORD

RESIDENT SUPERINTENDENT'S DAILY REPORT

**ECC SITE
ZIONSVILLE, INDIANA**
PROJECT NUMBER 2396
REPORT NUMBER 028

Date: 10-7-93

Day	S	M	T	W	TH	F	S
WEATHER	Bright Sun	Clear	Overcast	Rain	Snow		
TEMP.	To 32	32-50	50-70	70-85	85 up		
WIND	Still	Moder	High	Report No.			
HUMIDITY	Dry	Moder	Humid	028			

Average Field Force			
Name of Contractor <i>AWD Technologies, Inc. SMB Surveying Smock and Associates</i>	Non-manual <i>3 0</i>	Manual <i>4 2 5</i>	Remarks <i>Decom Pad Sub</i>
Visitors			
Time	Representing	Representing	Remarks

Equipment at the Site: Track loader, Track Excavator, Roller Compactor

Construction Activities: Continued excavation of NW Diversion Channel. Final roll of parking area. Finished NW ditchwork. Started north portion of SE Diversion Channel. NW trench excavation - some of toughest material yet.

MSE Surveying reset fence line.

Smock and Assoc. continued interior forms for decom pad

By: *J. N. [Signature]* Title: *Resident Superintendent*

- Distribution:
1. Independent CQA Officer
 2. ECC Trust's Engineer
 3. Site File

PROJECT RECORD

RESIDENT SUPERINTENDENT'S DAILY REPORT

**ECC SITE
ZIONSVILLE, INDIANA**
PROJECT NUMBER 2396
REPORT NUMBER 029

Date: 10-8-93

Day	S	M	T	W	TH	F	S
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WEATHER	Bright Sun	Clear	Overcast	Rain	Snow
TEMP.	To 32	32-50	50-70	70-85	85 up
WIND	Still	Moder	High	Report No.	
HUMIDITY	Dry	Moder	Humid	029	

Average Field Force			
Name of Contractor	Non-manual	Manual	Remarks
AWD Technologies, Inc.	3	4	Decm Pad Sub.
Smock and Assoc.	0	4	
Visitors			
Time	Representing	Representing	Remarks
12:00 NOON	Tim Haggerty Midwest Testing		

Equipment at the Site: Track Loader, Track Excavator, Dozer

Construction Activities: S. Weishaar notices cracks in N, W, E curb walls of decm pad. Notified GEM (C. Jackson) make today + Monday.
Detect edge in SE Direction Channel behind trailers! Stopped work.
Continued regrading north corner with dozer and loader.
Resolved cure and seal product in lieu of water curing as per Tech. Specs.

Smock and Assoc poured inside slab of decm pad. at NW, NE, SW, and SE corners of slab.

By: J. R. Fife Title: Resident Superintendent

- Distribution:
1. Independent CQA Officer
 2. ECC Trust's Engineer
 3. Site File

PROJECT RECORD

RESIDENT SUPERINTENDENT'S DAILY REPORT

**ECC SITE
ZIONSVILLE, INDIANA**
PROJECT NUMBER 2396
REPORT NUMBER 030

Date: 10-11-93

Day	S	M	T	W	TH	F	S
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WEATHER	Bright Sun	Clear	Overcast	Rain	Snow
TEMP.	To 32	32-50	50-70	70-85	85 up
WIND	Still	Moder	High	Report No.	
HUMIDITY	Dry	Moder	Humid	030	

Average Field Force			
Name of Contractor <i>AWD Technologies, Inc. Smock and Assoc.</i>	Non-manual <i>3</i>	Manual <i>4</i>	Remarks <i>Decm Pad Sub.</i>
Visitors <i>ELCONCO</i>			
Time	Representing	Representing	Remarks

Equipment at the Site: Dozer TRACK Loader, TRACK EXCAVATOR, ROLLER COMPACTOR

Construction Activities: - SMOCK STRIPPED & CLEARED SLAB FORMS
- ELCONCO STARTED ELECTRICAL PANE WORK
- AWD SET RCP IN NORTH WEST DITCH AND REGRADE
NORTH END OF SUPPORT ZONE

By: J. R. [Signature] Title: Resident Superintendent

- Distribution:
1. Independent CQA Officer
 2. ECC Trust's Engineer
 3. Site File

PROJECT RECORD

RESIDENT SUPERINTENDENT'S DAILY REPORT

**ECC SITE
ZIONSVILLE, INDIANA**
PROJECT NUMBER 2396
REPORT NUMBER 031

Date: 10-12-93

Day	S	M	<u>T</u>	W	TH	F	S
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WEATHER	Bright Sun	<u>Clear</u>	Overcast	Rain	Snow
TEMP.	To 32	32-50	<u>56-70</u>	70-85	85 up
WIND	Still	<u>Moder</u>	High	Report No.	
HUMIDITY	Dry	<u>Moder</u>	Humid	<u>031</u>	

Average Field Force			
Name of Contractor <u>AWD Technologies, Inc. Smock and Assoc.,</u>	Non-manual <u>3</u>	Manual <u>4 + 4 + 2 + 2</u>	Remarks <u>Survey - SUB ELECTRICAL SUB Decor Pad Sub.</u>
Visitors <u>MSE, ELCOUCCO</u>			
Time	Representing	Representing	Remarks

Equipment at the Site: TRACK LOADER, TRACK EXCAVATOR,
Roller Compactor, Dozer

Construction Activities:
- AWD Reexcavate North Ditch + Place 12" x 30" RCP
- SMOCK Repair + Casts and Prepared Forms
- MSE Restored WW Storage Pad
- ELCOUCCO Prepared Electrical Panel

By: JR Eife Title: Resident Superintendent

- Distribution:
1. Independent CQA Officer
 2. ECC Trust's Engineer
 3. Site File

PROJECT RECORD

RESIDENT SUPERINTENDENT'S DAILY REPORT

**ECC SITE
ZIONSVILLE, INDIANA**
PROJECT NUMBER 2396
REPORT NUMBER 032

Date: 10-13-93

Day	S	M	T	W	TH	F	S
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WEATHER	Bright Sun	Clear	Overcast	Rain	Snow
TEMP.	To 32	32-50	50-70	70-85	85 up
WIND	Still	Moder	High	Report No.	
HUMIDITY	Dry	Moder	Humid	32	

Average Field Force			
Name of Contractor	Non-manual	Manual	Remarks
AWD TECHNOLOGIES, INC SMOCK ASSOCIATES, ELKINS	2	4 2	Decor Pad Electronic SUBS
Visitors			
Time	Representing	Representing	Remarks

Equipment at the Site: Track Loader, EXCAVATOR, Roller Compactor
DOZER

Construction Activities:
- AWD Place RCP AT south most ENTRANCE
- SMOCK Pour 4 FOUR concrete sections
-
-
-

By: John W Harris For Jim Pife **Title:** Resident Superintendent

- Distribution:**
1. Independent CQA Officer
 2. ECC Trust's Engineer
 3. Site File

PROJECT RECORD

RESIDENT SUPERINTENDENT'S DAILY REPORT

**ECC SITE
ZIONSVILLE, INDIANA**
PROJECT NUMBER 2396
REPORT NUMBER 033

Date: 10-14-93

Day

S	M	T	W	(TH)	F	S
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WEATHER	Bright Sun	Clear	Overcast	Rain	Snow
TEMP.	To 32	32-50	50-70	70-85	85 up
WIND	SWIF	Moder	High	Report No.	
HUMIDITY	Day	Moder	Humid	33	

Average Field Force			
Name of Contractor	Non-manual	Manual	Remarks
AWD Technologies	2	4 5	Decor Pool Sign
Visitors			
Time	Representing	Representing	Remarks

Equipment at the Site: Track loader, Excavator, Compactor, Dozer

Construction Activities: Concrete Pool completed by Smock
Trenching & grading in NE Trench & ground decor-pool

By: JR Fip **Title:** Resident Superintendent

- Distribution:**
1. Independent CQA Officer
 2. ECC Trust's Engineer
 3. Site File

PROJECT RECORD

RESIDENT SUPERINTENDENT'S DAILY REPORT

**ECC SITE
ZIONSVILLE, INDIANA**
PROJECT NUMBER 2326
REPORT NUMBER 034

Date: 10-15-98

Day	S	M	T	W	TH	P	S
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WEATHER	<u>Bright Sun</u>	Clear	Overcast	Rain	Snow
TEMP.	To 32	<u>32-50</u>	50-70	70-85	85 up
WIND	<u>SW</u>	Moder	High	Report No.	
HUMIDITY	<u>Dry</u>	Moder	Humid	<u>34</u>	

Average Field Force			
Name of Contractor	Non-manual	Manual	Remarks
<u>Allied Technologies</u>	<u>2</u>	<u>4</u> <u>2</u>	<u>- Concrete Subs</u>
Visitors			
Time	Representing	Representing	Remarks

Equipment at the Site: Track loader, Excavator, Compactor, Dozer

Construction Activities: Began construction of wastewater storage pool
Concrete sub removed forms & installed some grating

By: J.R. J... Title: Resident Superintendent

- Distribution:
1. Independent CQA Officer
 2. ECC Treat's Engineer
 3. Site File

PROJECT RECORD

RESIDENT SUPERINTENDENT'S DAILY REPORT

ECC SITE
ZIONSVILLE, INDIANA
PROJECT NUMBER 2396
REPORT NUMBER 035

Date: 10-18-93

Day S M T W TH F S

WEATHER	Bright Sun	Clear	Overcast	Rain	Snow
TEMP.	To 32	32-50	50-70	70-85	85 up
WIND	Still	Moder	High	Report No.	
HUMIDITY	Dry	Moder	Humid	35	

Average Field Force			
Name of Contractor	Non-manual	Manual	Remarks
AWD Technologies	2	3 1	Concrete Sub
Visitors			
Time	Representing	Representing	Remarks

Equipment at the Site: Excavator, Tractor, Compactor, Dozer

Construction Activities: Concrete Sub cracks joints in concrete pad
- Resumed constructing Waste Water Storage Pond
- Equipment Delivered - Bobcat w/ auger, Roller/Compactor, Backhoe
- Equipment returned - Excavator (P150)

By: JR Fife Title: Resident Superintendent

- Distribution:
1. Independent CQA Officer
 2. ECC Treat's Engineer
 3. Site File

PROJECT RECORD

RESIDENT SUPERINTENDENT'S DAILY REPORT

**ECC SITE
ZIONSVILLE, INDIANA**
PROJECT NUMBER 2396
REPORT NUMBER 036

Date: 10-19-93

Day

S	M	T	W	TH	F	S
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WEATHER	Bright Sun	Clear	Overcast	Rain	Snow
TEMP.	To 32	33-50	50-70	70-85	85 up
WIND	SW	Moder	High	Report No. <u>36</u>	
HUMIDITY	Dry	Moder	Humid		

Average Field Force			
Name of Contractor	Non-manual	Manual	Remarks
<u>AWD Technologies</u>	<u>2</u>	<u>4</u>	
Visitors			
Time	Representing	Representing	Remarks
<u>0720-0910</u>	<u>IDEM</u>		

Equipment at the Site: ~~Front loader~~, Track loader, Compactor, Dozer-Backhoe, Bobcat w/ loader

Construction Activities: Resumed tank cutting activities

By: J.R. Fife Title: Resident Superintendent

- Distribution:**
1. Independent CQA Officer
 2. ECC Treat's Engineer
 3. Site File

PROJECT RECORD

RESIDENT SUPERINTENDENT'S DAILY REPORT

**ECC SITE
ZIONSVILLE, INDIANA**
PROJECT NUMBER 2396
REPORT NUMBER 037

Date: 10-20-93

Day

S	M	T	W	TH	F	S
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WEATHER	Bright Sun	Clear	Overcast	Rain	Snow
TEMP.	To 32	32-50	50-75	70-85	85 up
WIND	SW	Moder	High	Report No.	
HUMIDITY	Dry	Moder	Humid	37	

Average Field Force			
Name of Contractor	Non-manual	Manual	Remarks
<i>AWD Technologies</i>	<i>2</i>	<i>4</i>	
Visitors			
Time	Representing	Representing	Remarks

Equipment at the Site: Trackloader Excavator Compact Driller
Backhoe

Construction Activities: Began setup for construction of side wall
barriers on decomp pad & tank cutting
1100 hrs - Sent crew home for the day due to heavy rain

By: *J. K. Fife* Title: Resident Superintendent

- Distribution:**
1. Independent CQA Officer
 2. ECC Trust's Engineer
 3. Site File

PROJECT RECORD

RESIDENT SUPERINTENDENT'S DAILY REPORT

**ECC SITE
ZIONSVILLE, INDIANA**
PROJECT NUMBER 2326
REPORT NUMBER 038

Date: 10-21-93

Day

S	M	T	W	TH	F	S
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WEATHER	Bright Sun	<u>Clear</u>	Overcast	Rain	Snow
TEMP.	To 32	32-50	<u>60-70</u>	70-85	85 up
WIND	<u>SW</u>	Moder	High	Report No.	
HUMIDITY	<u>Day</u>	Moder	Humid	<u>050</u>	

Average Field Force			
Name of Contractor	Non-manual	Manual	Remarks
<u>AWD Technologies</u>	<u>2</u> 1	<u>4</u>	<u>AWD H+S Rep</u>

Visitors			
Time	Representing	Representing	Remarks

Equipment at the Site: Track loader, Excavator, Compactor, Digger
Backhoe

Construction Activities: Began construction splash shields for deep pond
Overhead Piping installed
Resumed tank cutting

By: J.R. Info **Title:** Resident Superintendent

- Distribution:**
1. Independent CQA Officer
 2. ECC Treat's Engineer
 3. Site File

PROJECT RECORD

RESIDENT SUPERINTENDENT'S DAILY REPORT

**ECC SITE
ZIONSVILLE, INDIANA**
PROJECT NUMBER 2286
REPORT NUMBER 039

Date: 10-22-93

Day

S	M	T	W	TH	F	S
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WEATHER	Bright Sun	Clear	Overcast	Rain	Snow
TEMP.	To 32	32-50	50-70	70-85	85 up
WIND	SW	Moder	High	Report No.	
HUMIDITY	Dry	Moder	Humid	039	

Average Field Force			
Name of Contractor	Non-manual	Manual	Remarks
<i>A.W. Technologies</i>	<i>3</i>	<i>4</i>	
Visitors			
Time	Representing	Representing	Remarks

Equipment at the Site: Track loader, Excavator, Compactor, Dozer
Backhoe

Construction Activities: Continued construction of waste water storage
Pool subgrade. General site cleanup

By: *J.R. Gfo* **Title:** Resident Superintendent

- Distribution:**
1. Independent CQA Officer
 2. ECC Trust's Engineer
 3. Site File

PROJECT RECORD

RESIDENT SUPERINTENDENT'S DAILY REPORT

**ECC SITE
ZIONSVILLE, INDIANA**
PROJECT NUMBER 2396
REPORT NUMBER 040

Date: 10-23-93

Day

S	M	T	W	TH	F	S
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WEATHER	Bright Sun	Clear	Overcast	Rain	Snow
TEMP.	Te 32	32-50	50-79	70-85	85 up
WIND	0-10	Moder	High	Report No.	
HUMIDITY	Dry	Moder	Humid	040	

Average Field Force			
Name of Contractor	Non-manual	Manual	Remarks
A.W. Technology	1	2	
Visitors			
Time	Representing	Representing	Remarks
	Taylor Construction		W.W. Park Lane

Equipment at the Site: Track loader, Excavator, Compactor, Dozer, Backhoe

Construction Activities: Taylor Const. installed liner for waste water storage pond. Geotextile + #3 Stone placed over liner. Concrete poured in fence post holes

By: J. R. [Signature] **Title:** Resident Superintendent

- Distribution:**
1. Independent CQA Officer
 2. ECC Trust's Engineer
 3. Site File

PROJECT RECORD

RESIDENT SUPERINTENDENT'S DAILY REPORT

**ECC SITE
ZIONSVILLE, INDIANA**
PROJECT NUMBER 2396
REPORT NUMBER 041

Date: 10-25-93

Day S M T W TH F S

WEATHER	Bright Sun	<u>Clear</u>	Overcast	Rain	Snow
TEMP.	To 32	32-50	<u>50-70</u>	70-85	85 up
WIND	<u>Still</u>	Moder	High	Report No.	
HUMIDITY	Dry	<u>Moder</u>	Humid	<u>041</u>	

Average Field Force			
Name of Contractor	Non-manual	Manual	Remarks
<u>Quip Technologies Inc</u>	<u>2</u>	<u>4</u>	<u>Grading/Aggregates wastewater storage pond silence grounds (posts)</u>
Visitors			
Time	Representing	Representing	Remarks
<u>09:00</u>	<u>Hoosier Fence</u>		<u>Fencing (Exclusion Boundary)</u>

Equipment at the Site: Jack loader, ~~excavator~~, Pavers, Bobcat, Backhoe

Construction Activities:

- area placed aggregate around wastewater storage pond
- H&W started cutting of tracks for scrape
- Hoosier Fence placed Exclusion Zone Boundary around southern end of site (from N end of Excavator tower to southern parking fence this is)

By: [Signature] Title: Resident Superintendent (Acting)

- Distribution:
1. Independent CQA Officer
 2. ECC Trust's Engineer
 3. Site File

PROJECT RECORD

RESIDENT SUPERINTENDENT'S DAILY REPORT

ECC SITE
ZIONSVILLE, INDIANA
PROJECT NUMBER 2396
REPORT NUMBER 042

Date: 10-26-93

Day S M **(T)** W TH F S

WEATHER	Bright Sun	Clear	Overcast	Rain	Snow
TEMP.	To 32	32-50	50-70	70-85	85 up
WIND	Still	Moder	High	Report No.	
HUMIDITY	Dry	Moder	Humid	042	

Average Field Force			
Name of Contractor	Non-manual	Manual	Remarks
AWD Technologies	2	4	Graveling / Aggregate DRAIN PITS SPLASH GUARD TANK CUTTING 10 hrs
Visitors <u>Mike Austin, Mike Spickard of Oscar Wianski</u>			
Time	Representing	Representing	Remarks
0700 8:45	Hoosier Fence Oscar Wianski		Exclusion Boundary Fence Work Site Site Walk (Tank)

Equipment at the Site: Track Loader Dozer Robert Barkhoe
Roller ~~not~~ switched out with delivery of roller.

- Construction Activities:**
- Continued placement of geotextile around pits
 - Continued Aggregate placement around wall/water storage and "DRAIN" Pits. Graded and Rolled
 - Continued with rock curbing on "DRAIN" and Splash Guards
 - Continued with Tank cutting.

Subcontractor (Hoosier Fence) placed Exclusion zone Boundary Fence

By: John W. Davis Title: Resident Superintendent (Acting)

- Distribution:**
1. Independent CQA Officer
 2. ECC Trust's Engineer
 3. Site File

PROJECT RECORD

RESIDENT SUPERINTENDENT'S DAILY REPORT

**ECC SITE
ZIONSVILLE, INDIANA**
PROJECT NUMBER 2306
REPORT NUMBER 043

Date: 10-27-93

Day	S	M	T	W	TH	F	S
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WEATHER	Bright Sun	Clear	Overcast	Rain	Snow
TEMP.	To 32	32-50	50-70	70-85	85 up
WIND	Still	Moder	High	Report No.	
HUMIDITY	Dry	Moder	Humid	043	

Average Field Force			
Name of Contractor	Non-manual	Manual	Remarks
AWO Technologies	2	4	Grading/Aggregates "Decon" Guard 10 HRS
Visitors <u>Jim Smith & William ?</u>			
Time	Representing	Representing	Remarks
1330	<u>IDEM</u>		

Equipment at the Site: Track loader, Deter, ~~Roller~~ Bobcat Roller

Construction Activities:

- Fire tanks set in wastewater storage pad and south of pad.
- Splash guards on "Decon" pad finalized
- Drums (misc.) moved to concrete pad inside remed. action zone (SOUTHERN SECTION)
- Aggregates (# 2 & 5) finished around pads (graded & rolled).

By: John M. Harris Title: Resident Superintendent (Acting)

- Distribution:
1. Independent CQA Officer
 2. ECC Trust's Engineer
 3. Site File

PROJECT RECORD

RESIDENT SUPERINTENDENT'S DAILY REPORT

**ECC SITE
ZIONSVILLE, INDIANA**
PROJECT NUMBER 2306
REPORT NUMBER 04

Date: 10-28-93

Day	S	M	T	W	(TH)	F	S
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WEATHER	Bright Sun	Clear	Overcast	Rain	Snow
TEMP.	Te 32	32-50	(50-70)	70-85	85 up
WIND	SW	(Moder)	High	Report May	
HUMIDITY	(Dry)	Moder	Humid	0.4	

Average Field Force			
Name of Contractor	Non-manual	Manual	Remarks
Aero Technology	2	4	Tank cutting Equipment Installation
Visitors			
Time	Representing	Representing	Remarks

10 (123)

Equipment at the Site: Tractor, Dozer, Roller

Construction Activities: See ~~report~~. Tank cutting work
we started after "tees" and operations completely installed.
• Fire Tank south of wastewater
storage pit filled with city water (Trans-chem water delivery).
• Fire Tank PLUMBING INSTALLED.

By: John W. Harris Title: Resident Superintendent (Acting)

- Distribution:
1. Independent CQA Officer
 2. ECC Treat's Engineer
 3. Site File

PROJECT RECORD

RESIDENT SUPERINTENDENT'S DAILY REPORT

**ECC SITE
ZIONSVILLE, INDIANA**
PROJECT NUMBER 2376
REPORT NUMBER 045

Date: 10-23-73

Day S M T W TH **F** S

WEATHER	Bright Sun	<u>Clear</u>	Overcast	Rain	Snow
TEMP.	To 32	<u>62-50</u>	50-70	70-85	85 up
WIND	<u>SW</u>	Moder	High	Report No.	
HUMIDITY	<u>Dry</u>	Moder	Humid	<u>045</u>	

Average Field Force			
Name of Contractor <u>Am'D Technologies</u>	Non-manual <u>2</u>	Manual <u>4</u>	Remarks <u>Truck cutting Scrap stockpiling</u>
Visitors			
Time	Representing	Representing	Remarks

8 hrs

Equipment at the Site: Truck loader, Dozer, Excavator (PL320)

Construction Activities: 1. Truck cutting (3) completed - Excavator
Operational
process Bldg.
2. Tires stock piled South of old

By: J. Williams

Title: Resident Superintendent (Acting)

- Distribution:
1. Independent CQA Officer
 2. ECC Trust's Engineer
 3. Site File

PROJECT RECORD

RESIDENT SUPERINTENDENT'S DAILY REPORT

**ECC SITE
ZIONSVILLE, INDIANA**
PROJECT NUMBER 6396
REPORT NUMBER 076

Date: 11/1/93

Day

S	M	T	W	TH	F	S
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WEATHER	Bright Sun	Clear	Overcast	Rain	Snow
TEMP.	To 32	32-50	50-70	70-85	85 up
WIND	Still	Moder	High	Report No.	
HUMIDITY	Dry	Moder	Humid	<u>076</u>	

Average Field Force			
Name of Contractor	Non-manual	Manual	Remarks
<u>AWD Technologies</u>		<u>2</u>	
Visitors			
Time	Representing	Representing	Remarks
<u>12:00-5:00</u>	<u>SF Dept. - AWD</u>		

Equipment at the Site: Trackloaders, Dozer, Excavator, Roller

Construction Activities: - Resumed cutting & washing Tanks

- 1st Roll off Box delivered for scrap

By: [Signature] Title: Resident Superintendent

- Distribution:
1. Independent CQA Officer
 2. ECC Trust's Engineer
 3. Site File

PROJECT RECORD

RESIDENT SUPERINTENDENT'S DAILY REPORT

**ECC SITE
ZIONSVILLE, INDIANA**
PROJECT NUMBER 2775
REPORT NUMBER 078

Date: 11-2-83

Day	S	M	T	W	TH	F	S
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WEATHER	Bright Sun	Clear	Overcast	Rain	Snow
TEMP.	To 32	52-58	50-70	70-85	85 up
WIND	SW	Moder	High	Report No.	
HUMIDITY	Dry	Moder	Humid	041	

Average Field Force			
Name of Contractor	Non-manual	Manual	Remarks
<i>AUD Technologies</i>	3	4	
Visitors			
Time	Representing	Representing	Remarks
<i>0730-1500</i>	<i>5 BENJAMIN-AUD</i>		

Equipment at the Site: Trackloader, Dozer, Excavator, Roller

Construction Activities: Resumed cutting & washing tanks

By: J R Fife Title: Resident Superintendent

- Distribution:
1. Independent CQA Officer
 2. ECC Treat's Engineer
 3. Site File

PROJECT RECORD

RESIDENT SUPERINTENDENT'S DAILY REPORT

**ECC SITE
ZIONSVILLE, INDIANA**
PROJECT NUMBER 2396
REPORT NUMBER 048

Date: 11/3/73

Day

S	M	T	W	TH	F	S
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WEATHER	Bright Sun	Clear	Overcast	Rain	Snow
TEMP.	To 32	32-50	50-70	70-85	85 up
WIND	Still	Moder	High	Report No.	
HUMIDITY	Dry	Moder	Humid	048	

Average Field Force			
Name of Contractor	Non-manual	Manual	Remarks
<i>AWD Technologies</i>	3	4	
Visitors			
Time	Representing	Representing	Remarks
1600 1515	T. McKinley (PDC) M. Du... K-AWD		

Equipment at the Site: Track Loader, Excavator, Dozer, Biller

Construction Activities: Resumed cutting + washing tanks
Stone delivered + placed around process bldg.
Wipe samples taken from suspect PCB tanks

By: *J.R. Jif* Title: Resident Superintendent

- Distribution:**
1. Independent CQA Officer
 2. ECC Treat's Engineer
 3. Site File

RESIDENT SUPERINTENDENT'S DAILY REPORT

**ECC SITE
ZIONSVILLE, INDIANA**
PROJECT NUMBER 2396
REPORT NUMBER 019

Date: 11/4/93

Day:

S	M	T	W	TH	F	S
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WEATHER	Bright Sun	Clear	Overcast	Rain	Snow
TEMP.	To 32	32-50	50-70	70-85	85 up
WIND	SW	Moder	High	Report No.	
HUMIDITY	DR	Moder	Humid	049	

Average Field Force			
Name of Contractor	Non-manual	Manual	Remarks
ALUD Technologies	2	4	
Visitors			
Time	Representing	Representing	Remarks
0730 -	3 man Crew - Hoarier		Exclusion Zone Fence
0800 -	T. French: Micr: Air		Asbestos Survey

Equipment at the Site: Truck, Excavator, Dozer, Roller

Construction Activities: Resumed cutting & washing tank
Asbestos survey conducted
Began construction of Exclusion Zone Fencing
Demolished Process Bldg
Began segregating rubble for disposal

By: *JM Inf* Title: Resident Superintendent

- Distribution:**
1. Independent CQA Officer
 2. ECC Treat's Engineer
 3. Site File

PROJECT RECORD

RESIDENT SUPERINTENDENT'S DAILY REPORT

**ECC SITE
ZIONSVILLE, INDIANA**
PROJECT NUMBER 2396
REPORT NUMBER 050

Date: 11/15/93

Day

S	M	T	W	TH	F	S
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WEATHER	Bright Sun	Clear	Overcast	Rain	Snow
TEMP.	To 32	32-50	50-70	70-85	85 up
WIND	SW	Moder	High	Report No.	
HUMIDITY	Dry	Moder	Humid	050	

Average Field Force			
Name of Contractor	Non-manual	Manual	Remarks
<u>ALWD Technologies</u>	<u>2</u>	<u>4</u>	
Visitors			
Time	Representing	Representing	Remarks

Equipment at the Site: Track loader, Excavator, Dozer, Roller

Construction Activities: Begin Segregation + Loading Steel from Process Site.
Completed Removal of original existing fence around Chlorine Storage area.

By: J.R. [Signature] **Title:** Resident Superintendent

- Distribution:**
1. Independent CQA Officer
 2. ECC Trust's Engineer
 3. Site File

PROJECT RECORD

RESIDENT SUPERINTENDENT'S DAILY REPORT

**ECC SITE
ZIONSVILLE, INDIANA**
PROJECT NUMBER 296
REPORT NUMBER 051

Date: 1/5/07

Day S (M) T W TH F S

WEATHER	<u>Bright Sun</u>	Clear	Overcast	Rain	Snow
TEMP.	To 32	<u>32-50</u>	50-70	70-85	85 up
WIND	Still	Moder	High	Report No.	
HUMIDITY	Dry	Moder	Humid	<u>051</u>	

Average Field Force			
Name of Contractor	Non-manual	Manual	Remarks
<u>AWD Technologies</u>	<u>2</u>	<u>4</u>	
Visitors			
Time	Representing	Representing	Remarks
<u>10:00 11:00</u>	<u>M. Peter - L. Chyke S. de Jeter - AWD</u>		

Equipment at the Site: Track loader, Excavator, Dozer, Roller

Construction Activities: Removal segregation + load out of scrap/dump
Began installing protective barriers around master well casing

By: [Signature] Title: Resident Superintendent

- Distribution:**
1. Independent CQA Officer
 2. ECC Trust's Engineer
 3. Site File

PROJECT RECORD

RESIDENT SUPERINTENDENT'S DAILY REPORT

**ECC SITE
ZIONSVILLE, INDIANA**
PROJECT NUMBER 2376
REPORT NUMBER 262

Date: 11/9/90

Day

S	M	T	W	TH	F	S
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WEATHER	Bright Sun	Clear	Overcast	Rain	Snow
TEMP.	To 32	32-50	50-70	70-85	85 up
WIND	gull	Moder	High	Report No.	
HUMIDITY	Dry	Moder	Humid	052	

Average Field Force			
Name of Contractor	Non-manual	Manual	Remarks
Visitors			
Time	Representing	Representing	Remarks
07:00 09:00	N. Fiershick - CH2MHill M. Decker S. DeRattler	AVI	

Equipment at the Site: Trak loader excavator, Dozer, Back

Construction Activities: General site cleanup - Stone delivered
- Gravel placed in Top Rap Area

By: J. A. Ego Title: Resident Superintendent

- Distribution:
1. Independent CQA Officer
 2. ECC Trust's Engineer
 3. Site File

PROJECT RECORD

RESIDENT SUPERINTENDENT'S DAILY REPORT

**ECC SITE
ZIONSVILLE, INDIANA**
PROJECT NUMBER 2396
REPORT NUMBER 053

Date: 11/22/03

Day

S	M	T	W	TH	F	S
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WEATHER	Bright Sun	Clear	Overcast	Rain	Snow
TEMP.	To 32	32-50	50-70	70-85	85 up
WIND	SW	Moder	High	Report No.	
HUMIDITY	Dry	Moder	Humid	053	

Average Field Force			
Name of Contractor	Non-manual	Manual	Remarks
<i>AWD Technologies</i>	2	7	
Visitors			
Time	Representing	Representing	Remarks

Equipment at the Site: Truck/Trailer, Excavator, Digger, Roller

Construction Activities: Cut T33 + Steel Rep Rep
* Cleaned up site + down pad
- Replaced spray shield

By: *J. H. [Signature]* **Title:** Resident Superintendent

- Distribution:**
1. Independent CQA Officer
 2. ECC Treat's Engineer
 3. Site File

PROJECT RECORD

RESIDENT SUPERINTENDENT'S DAILY REPORT

**ECC SITE
ZIONSVILLE, INDIANA**
PROJECT NUMBER 2556
REPORT NUMBER 254

Date: 11/1/03

Day

S	M	T	W	TH	F	S
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WEATHER	Bright Sun	Clear	Overcast	Rain	Snow
TEMP.	To 32	32-50	50-70	70-85	85 up
WIND	SW	Moder	High	Report No.	
HUMIDITY	Dry	Moder	Humid	<u>054</u>	

Average Field Force			
Name of Contractor	Non-manual	Manual	Remarks
<u>ALWD Technologies</u>	<u>L</u>	<u>Y</u>	
Visitors			
Time	Representing	Representing	Remarks
<u>0750</u>	<u>M. Petershock - CH, MWH</u>		

Equipment at the Site: Excavator, Tractor, Dozer, Digger

Construction Activities: Finished cutting last 3 tanks
10 loads of stone delivered
Five-footed support zone area

By: [Signature] Title: Resident Superintendent

- Distribution:
1. Independent CQA Officer
 2. ECC Trust's Engineer
 3. Site File

PROJECT RECORD

RESIDENT SUPERINTENDENT'S DAILY REPORT

**ECC SITE
ZIONSVILLE, INDIANA**
PROJECT NUMBER 2376
REPORT NUMBER 23

Date: 1/22/93

Day	S	M	T	W	TH	F	S
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WEATHER	Bright Sun	Clear	Overcast	Rain	Snow
TEMP.	To 32	32-50	60-70	70-85	85 up
WIND	SW	Moder	High	Report No.	
HUMIDITY	Dry	Moder	Humid	055	

Average Field Force			
Name of Contractor <u>AUD Technologies</u>	Non-manual <input checked="" type="checkbox"/>	Manual <input checked="" type="checkbox"/>	Remarks
Visitors			
Time	Representing	Representing	Remarks

Equipment at the Site: Excavator, Track loader, Dozer, Roller

Construction Activities: Started dismantling the boiler
Dozer trailer removed from site

By: J.A. Fife Title: Resident Superintendent

- Distribution:
1. Independent CQA Officer
 2. ECC Trust's Engineer
 3. Site File

PROJECT RECORD

RESIDENT SUPERINTENDENT'S DAILY REPORT

ECC SITE
ZIONSVILLE, INDIANA
PROJECT NUMBER 2596
REPORT NUMBER 286

Date: 11/15/03

Day

S	M	T	W	TH	F	S
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WEATHER	Bright Sun	Clear	<u>Overcast</u>	Rain	Snow
TEMP.	To 32	<u>32-50</u>	50-70	70-85	85 up
WIND	<u>SW</u>	Moder	High	Report No.	
HUMIDITY	<u>Dry</u>	Moder	Humid	076	

Average Field Force			
Name of Contractor	Non-manual	Manual	Remarks
<u>ALWD Techn. Inc.</u>	<u>2</u>	<u>4</u>	
Visitors			
Time	Representing	Representing	Remarks
<u>0900</u>	<u>4 - Hoopier Fence</u> <u>2 - MSE</u>		

Equipment at the Site: Excavator, Track loader, Dozer, Roller

Construction Activities: Continued clearing the site

- Demolishing from Decora park
- Cleared out Decora pool sump
- Tool trailer removed from site
- Began installing permanent outside fencing

By: [Signature] Title: Resident Superintendent

- Distribution:
1. Independent CQA Officer
 2. ECC Trust's Engineer
 3. Site File

PROJECT RECORD

RESIDENT SUPERINTENDENT'S DAILY REPORT

**ECC SITE
ZIONSVILLE, INDIANA**
PROJECT NUMBER 2796
REPORT NUMBER 277

Date: 11/17/97

Day	S	M	T	W	TH	F	S
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WEATHER	Bright Sun	Clear	Overcast	Rain	Snow
TEMP.	To 32	32-50	50-70	70-85	85 up
WIND	SU	Moder	High	Report No.	
HUMIDITY	Dry	Moder	Humid	657	

Average Field Force			
Name of Contractor	Non-manual	Manual	Remarks
<i>AW Technology</i>	3	4	
Visitors			
Time	Representing	Representing	Remarks
0830	2 - <i>Heavy Fence</i>		

Equipment at the Site: Excavator, Track loader, Dozer, Roller, Manlift

- Construction Activities: Pumped rain water off decou pad.
- placed Generator in South corner
 - Prepared trailer #373 for demob
 - ~~Instal~~ - Fence installing fence parts (*Security Fence*)
 - 2 ~~men~~ men sent home at 12:00
 - Trailer #373 removed from site
 - 1 Roll off bin of Special waste taken off site
 - T. Danner on site - will take over as Resident Superintendent until site closure

By: *J.P. Duf* Title: Resident Superintendent

- Distribution:
1. Independent CQA Officer
 2. ECC Trust's Engineer
 3. Site File

PROJECT RECORD

RESIDENT SUPERINTENDENT'S DAILY REPORT

ECC SITE
ZIONSVILLE, INDIANA
PROJECT NUMBER 2396
REPORT NUMBER 057

Date: 11/18/03

Day

S	M	T	W	TH	F	S
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WEATHER	Bright Sun	Clear	Overcast	Rain	Snow
TEMP.	To 32	32-50	50-70	70-85	85 up
WIND	Still	Moder	High	Report No.	
HUMIDITY	Dry	Moder	Humid	057	

Average Field Force			
Name of Contractor	Non-manual	Manual	Remarks
<i>ALOJ Technologies</i>	3	4	
Visitors			
Time	Representing	Representing	Remarks
0800 1300	5 - Hoosier Fence		

Equipment at the Site: Excavator, Tractor, Roller, Manhole

Construction Activities: Hoosier Fence completes anchoring all posts for security fence

- Removed + Staged Transformers - PSI Energy Rep on site to consult + observe
- Telephone Pole Removed
- Deca Pad Sump Cleaned out
- Boiler Components loaded in R23's + staged until disposal approval
- Shipped 5 loads of special waste from outside remedial boundary + 3 loads from inside the remedial boundary

By: John Dorman Title: Resident Superintendent

- Distribution:
1. Independent CQA Officer
 2. ECC Trust's Engineer
 3. Site File

PROJECT RECORD

RESIDENT SUPERINTENDENT'S DAILY REPORT

ECC SITE
ZIONSVILLE, INDIANA
PROJECT NUMBER 2396
REPORT NUMBER 059

Date: 11/14/97

Day	S	M	T	W	TH	F	S
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WEATHER	Bright Sun	Clear	Overcast	Rain	Snow
TEMP.	To 32	32-50	50-70	70-85	85 up
WIND	Still	Moder	High	Report No.	
HUMIDITY	Dry	Moder	Humid	059	

Average Field Force			
Name of Contractor	Non-manual	Manual	Remarks
AWD Technology, Inc.	3	7	
Visitors			
Time	Representing	Representing	Remarks
08:00	1 - Howard Fence		

Equipment at the Site: Excavator, Tractor

Construction Activities: Howard Fence Began installing Chain-link fence
Starting in S.E. Corner
 • Last roll off of waste loaded - 2 Roll-offs with Bulb - clean
Staged outside the temporary fence until disposal is approved.
 • Worker Remedial zone with Bob Artis. identified a remedial soil sample debris
 • Began removing temporary Chain-link fence
 • Began Ground decon of nearby equipment

By: Thomas J. Downer Title: Resident Superintendent

- Distribution:**
1. Independent CQA Officer
 2. ECC Trust's Engineer
 3. Site File

PROJECT RECORD

RESIDENT SUPERINTENDENT'S DAILY REPORT

**ECC SITE
ZIONSVILLE, INDIANA**
PROJECT NUMBER 0363
REPORT NUMBER 060

Date: 1/22/93

Day	S	M	T	W	TH	F	S
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WEATHER	Bright Sun	Clear	Overcast	Rain	Snow
TEMP.	To 32	32-50	50-70	70-85	85 up
WIND	Still	Moder	High	Report No.	
HUMIDITY	Dry	Moder	Humid	060	

Average Field Force			
Name of Contractor	Non-manual	Manual	Remarks
<i>AWD Technologies</i>	<i>2</i>	<i>1</i>	<i>P. log-out & off</i>
Visitors			
Time	Representing	Representing	Remarks
	<i>2 - MSE survey 4 - House - fence</i>		

Equipment at the Site: Track loader, Excavator

- Construction Activities: Last load of special mix to be taken off site
- MSE completed support work for final A-3
 - House-fence received installing final 1/2 MSE
 - Track loader - Excavator decommissioned
 - Flat Bed Trailer staged for loading equipment for next day

By: Thomas J. Dornier Title: Resident Superintendent

- Distribution:
1. Independent CQA Officer
 2. ECC Trust's Engineer
 3. Site File

PROJECT RECORD

RESIDENT SUPERINTENDENT'S DAILY REPORT

**ECC SITE
ZIONSVILLE, INDIANA**
PROJECT NUMBER 2393
REPORT NUMBER 061

Date: 1/23/97

Day

S	M	T	W	TH	F	S
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WEATHER	Bright Sun	Clear	<u>Overcast</u>	Rain	Snow
TEMP.	To 32	32-50	<u>50-70</u>	70-85	85 up
WIND	<u>Still</u>	Moder	High	Report No.	
HUMIDITY	<u>Dry</u>	Moder	Humid	<u>061</u>	

Average Field Force			
Name of Contractor	Non-manual	Manual	Remarks
<u>AUD Techn. Inc.</u>	<u>2</u>	<u>2</u>	
Visitors			
Time	Representing	Representing	Remarks
<u>8:00</u>	<u>3- Hoosier fence</u>		

Equipment at the Site: Excavator, Truck loader

- Construction Activities: Resumed dismantling Exclusion Zone fence
- Loaded Fencing + materials onto flatbed trailer for shipment to site
 - Hoosier Fence resumed installing chain link fence - also installed gates
 - Damaged roll off was deconstructed + taken off site
 - Began cleaning up debris pad + dump
 - Haz Waste disposal (Boiler) has been approved Draft of Manifest to B. Auto for review
 - Arranged for Hydroseeding to be done tomorrow

By: Thomas J. Dornier Title: Resident Superintendent

- Distribution:
1. Independent CQA Officer
 2. ECC Trust's Engineer
 3. Site File

PROJECT RECORD

RESIDENT SUPERINTENDENT'S DAILY REPORT

**ECC SITE
ZIONSVILLE, INDIANA**
PROJECT NUMBER 2393
REPORT NUMBER 062

Date: 11/24/07

Day	S	M	T	W	TH	F	S
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WEATHER	Bright Sun	Clear	Overcast	Rain	Snow
TEMP.	To 32	32-50	30-70	70-85	85 up
WIND	Still	Moder	High	Report No.	
HUMIDITY	Dry	Moder	Humid	062	

Average Field Force			
Name of Contractor	Non-manual	Manual	Remarks
<u>AWD Technologies</u>	<u>2</u>	<u>2</u>	
Visitors			
Time	Representing	Representing	Remarks
<u>0730</u>	<u>J- Howler fence</u>		
<u>0950</u>	<u>2 - B George Hydroseed</u>		
<u>1330</u>	<u>2 - PSI Energy</u>		

Equipment at the Site: Excavator, Truck loader

- Construction Activities: Howler fence removed enclosing site. Link to post - 11/24/07
- North Trench Hydroseeded
 - Support line areas cleared of debris, & re graded
 - MW on SE corner uncovered
 - Design pad cleaned - 2 Drum. of sand - liquid transferred to 5 and seal
 - Supplies & material sent back to Indy office
 - PSI Energy Picked up the 2 Ten formers

By: Thomas Danner Title: Resident Supervisor

- Distribution:
1. Independent CQA Officer
 2. ECC Trust's Engineer
 3. Site File

PROJECT RECORD

RESIDENT SUPERINTENDENT'S DAILY REPORT

ECC SITE
ZIONSVILLE, INDIANA
PROJECT NUMBER 2572
REPORT NUMBER 500

Date: 1/21/02

Day	S	M	T	W	TH	F	S
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WEATHER	Bright Sun	Clear	Overcast	Rain	Snow
TEMP.	To 32	32-50	50-70	70-85	85 up
WIND	Still	Moder	High	Report No.	
HUMIDITY	Dry	Moder	Humid	063	

Average Field Force			
Name of Contractor	Non-manual	Manual	Remarks
<i>AWD Technologies</i>	2	1	
Visitors			
Time	Representing	Representing	Remarks

Equipment at the Site: _____

- Construction Activities:** Exclusion Zone Fencing picked up + taken to Psh
Polymer Coating Components delivered to site for crack repair in decu part sump
Crack in sump was chiseled open + primed
Scheduled: Power Shut off, Phos Disconnected, Trailer Demobed, Toilet retained
Roll offs with Boiler Components to be picked up + Decu water to be pumped off + disp
Excavator + Trackloader taken off site
Hay bales purchased for Trenches

By: Thomas J. Danner **Title:** Resident Superintendent

- Distribution:**
1. Independent CQA Officer
 2. ECC Trust's Engineer
 3. Site File

PROJECT RECORD

RESIDENT SUPERINTENDENT'S DAILY REPORT

**ECC SITE
ZIONSVILLE, INDIANA**
PROJECT NUMBER 2396
REPORT NUMBER 064

Date: 11/30/93

Day	S	M	T	W	TH	F	S
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WEATHER	Bright Sun	Clear	Overcast	Rain	Snow
TEMP.	To 32	32-50	50-70	70-85	85 up
WIND	Still	Moder	High	Report No.	
HUMIDITY	Dry	Moder	Humid	<u>064</u>	

Average Field Force			
Name of Contractor	Non-manual	Manual	Remarks
<u>AWD Technologies</u>	<u>2</u>	<u>2</u>	
Visitors			
Time	Representing	Representing	Remarks
<u>0800</u>	<u>3- Hoosier Fence</u>		

Equipment at the Site: _____

Construction Activities: Hoosier fence completed installing gate slide bar lock. & strung Barbed wire across SE trench
0800 - Clean Hoosier on site to pump off Decar water. Can only take 5000 gal w/ tank. Remaining water tomorrow morning

By: Thomas A. Danner Title: Resident Superintendent

- Distribution:
1. Independent CQA Officer
 2. ECC Trust's Engineer
 3. Site File

PROJECT RECORD

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PROJECT RECORD

ECC SUPERFUND SITE SITE PREPARATION & MATERIAL REMOVAL ZIONSVILLE, INDIANA

SUBMITTAL REGISTER REGISTER NO. 5412 (REVISED 9/24/93)

DATE RECD.	TRANS-MITTAL NO.	SPECIFICATION IDENTIFICATION (ITEM NO.)	SPECIFICATION PARAGRAPH NUMBER	DESCRIPTION OF SUBMITTAL	TYPE OF SUBMITTAL				NO. COPIES RECD.	ACTIONS				ACTION ELEMENT	CONTRACTOR SCHEDULE DATES		INDEPENDENT CQA-OFFICER ACTION DATES		DESIGN ENGINEER ACTION DATES		REMARKS	
					DRAWING	SAMPLE	GUARANTEE	FORM		CERTIFY	TEST	OTHER	NO EXEMPTIONS		TAKEN	RECORD	REVIEW	REJECTED	TECH REVIEW BY	SUBMIT		APPROVAL NEEDED BY
	SPMR-008	01310	1.02.A	PROGRESS SCHEDULES AND REPORTS (FINAL SCHEDULE)						X						ERM	AT END OF JOB					WILL SUBMIT AT END OF JOB
	SPMR-009	01310	1.06.A	PROGRESS SCHEDULES AND REPORTS (MONTHLY PROGRESS REPORT)						X						ERM	MONTHLY BY 4 th DAY					WILL SUBMIT MONTHLY BY 4 th DAY
	SPMR-010	01380	ALL	CONSTRUCTION PHOTOGRAPHS						X						ERM	MONTHLY WITH PROGRESS REPORT					WILL SUBMIT WITH MONTHLY PROGRESS REPORT
	SPMR-011	01385	1.03.A, 1.03.B	APPROVALS AND PERMITS						X						ERM	9/23/93	9/30/93	ASAP			
	SPMR-012	01385	1.03.C	APPROVALS AND PERMITS (IDEM SPECIAL WASTE APPLICATION)						X						IDEM (603) (6023)	9/22/93	ASAP	ASAP			MET WITH IDEM AND SUBMITTED APPLICATION 9/22/93
	SPMR-013	01390	1.04	HEALTH AND SAFETY (DOCUMENTATION)						X						ERM	AS REQUIRED S. WEISHARA					SUBMITTING AS REQUIRED TO QEM, ONLINE REP.
	SPMR-014	01392	ALL	ENVIRONMENTAL QUALITY ASSURANCE (DOCUMENTATION)						X						ERM	AS REQUIRED					SUBMIT TO QEM PER OCCURRENCE
	SPMR-015	01395	1.02.A	ENVIRONMENTAL CONTROL AND MAINTENANCE (ENVIRONMENTAL CONDITIONS SURVEY REPORT)						X						ERM	9/27/93	10/4/93				IN ACCORDANCE WITH ENV. CONTROL AND MAINT PLAN
	SPMR-016	01396	ALL	AIR MONITORING (DOCUMENTATION)						X						ERM	AS REQUIRED					SUBMIT AS PER AIR MONITORING PLAN
	SPMR-017	01400	1.04	CONTRACTOR QUALITY CONTROL (DOCUMENTATION)						X						ERM	AS REQUIRED					SUBMIT AS PER AIR MONITORING PLAN

BY: JR FIFE

TITLE: RESIDENT SUPERINTENDENT

DISTRIBUTION: 1. ECC TRUSTS ENGINEER 2. CONTRACTOR QC MANAGER 3. INDEPENDENT CQA OFFICER 4. DESIGN ENGINEER

PROJECT RECORD

ECC SUPERFUND SITE SITE PREPARATION & MATERIAL REMOVAL ZIONSVILLE, INDIANA

SUBMITTAL REGISTER
REGISTER NO. 5PMR (REVISED 9/24/93)

DATE REC'D.	TRANS-MITTAL NO.	SPECIFICATION IDENTIFICATION (ITEM NO.)	SPECIFICATION PARAGRAPH NUMBER	DESCRIPTION OF SUBMITTAL	TYPE OF SUBMITTAL							NO. COPIES REC'D.	ACTIONS					ACTION ELEMENT	CONTRACTOR SCHEDULE DATES			INDEPENDENT CQA OFFICER ACTION DATES		DESIGN ENGINEER ACTION DATES		REMARKS
					DRAWING	SAMPLE	GUARANTEE	FIELD DATA	CERTIFICATES	TEST REPORT	OTHER		NO. EXCEPTIONS TAKEN	MAKE CORRECTIONS NOTED	REVISE AND RESUBMIT	REJECTED	TECH REVIEW BY		SUBMIT	APPROVAL NEEDED BY	MATERIAL NEEDED BY	SUBMITTED TO INDEPENDENT CQA OFFICER	ACTION	SUBMITTED TO DESIGN ENGINEER	ACTION	
	SPMR-018-1	01410	1.03.B	TESTING LABORATORY SERVICES (GEOTECHNICAL LABORATORY)							X	2	X					ERM QEM	9/17/93	ASAP	—	9/17/93	APPROVED 9/21/93	—	—	
	SPMR-018-2	01410	1.03.C	TESTING LABORATORY SERVICES (GEOTEXTILE LAB REPORT)							X	2	X					ERM QEM	9/22/93	ASAP	ASAP	9/22/93	9/22/93	—	—	
	SPMR-018-3	01410	1.03.B	TESTING LABORATORY SERVICES (CONCRETE LABORATORY)							X	2						ERM QEM	9/27/93	10/4/93	—			—	—	
	SPMR-018-4	01410	1.03.C	TESTING LABORATORY SERVICES (CONCRETE LAB REPORTS)							X	2						ERM QEM	PER CONCRETE POUR	—	—			—	—	WILL SUBMIT PER CONCRETE POUR AS REQUIRED
	SPMR-018-5	01410	1.03.C	TESTING LABORATORY SERVICES (MEMBRANE LAB REPORT)							X	2						ERM QEM	9/27/93	10/4/93	10/4/93			—	—	
	SPMR-019	01410	1.03.C	TESTING LABORATORY SERVICES (ANALYTICAL LAB REPORTS)							X	2						ERM QEM	PER OCCUR- RENCE	—	—					WILL SUBMIT PER OCCURRENCE
	SPMR-020	01510	1.03.A	UTILITIES (POTABLE WATER CERTIFICATES)							X	2						ERM QEM	10/4/93	10/11/93	10/15/93					WILL SUBMIT A CERTIFICATE WITH EACH NEW LOAD OF WATER
	SPMR-021	01525	1.03.A	PROJECT IDENTIFICATION AND SIGNS (DRAWINGS)	X							2						ERM QEM	10/1/93	10/8/93	10/15/93			—	—	
	SPMR-022	01700	ALL	PROJECT RECORD DOCUMENTS/ CONTRACT CLOSEOUT							X	2						ERM QEM	WITHIN 30 DAYS OF JOB COMPLETION	—	—			—	—	WILL SUBMIT WITHIN 30 DAYS OF JOB COMPLETION
	SPMR-023	02091	1.03	WASTEWATER STORAGE PAD (MEMBRANE)		X			X	X		2						ERM QEM	9/27/93	10/1/93	10/4/93			—	—	

BY: J R FIFE

TITLE: RESIDENT SUPERINTENDENT

DISTRIBUTION: 1. ECC TRUST'S ENGINEER 2. CONTRACTOR QC MANAGER 3. INDEPENDENT CQA OFFICER 4. DESIGN ENGINEER

PROJECT RECORD

ECC SUPERFUND SITE
SITE PREPARATION & MATERIAL REMOVAL
ZIONSVILLE, INDIANA

SUBMITTAL REGISTER

REGISTER NO. SPMR (REVISED 9/24/93)

DATE REC'D.	TRANS-MITTAL NO.	SPECIFICATION IDENTIFICATION (ITEM NO.)	SPECIFICATION PARAGRAPH NUMBER	DESCRIPTION OF SUBMITTAL	TYPE OF SUBMITTAL							NO. COPIES REC'D.	ACTIONS					ACTION ELEMENT	CONTRACTOR SCHEDULE DATES			INDEPENDENT-GQA OFFICER ACTION DATES		DESIGN ENGINEER ACTION DATES		REMARKS		
					DRAWING	SAMPLE	QUARAN	MFO DATA	CERTIF	TEST RPT	OTHER		NO EXCEPTIONS TAKEN	MAKE CORRECTIONS NOTED	REUSE AND RESUBMIT	REJECTED	TECH REVIEW BY		SUBMIT	APPROVAL NEEDED BY	MATERIAL NEEDED BY	SUBMITTED TO INDEPENDENT GQA OFFICER	ACTION	SUBMITTED TO DESIGN ENGINEER	ACTION			
	SPMR-024	02175	1.04.A	CULVERTS			X	X	X			2						ERM QEM	10/4/93	10/11/93	10/15/93							
	SPMR-025	02180	1.04.A	MANHOLES (MANHOLE JOINT SEALANT)					X	X		2	X					ERM QEM	9/10/93	ASAP	ASAP	9/10/93	APPROVED 9/13/93					
	SPMR-026	02280	1.03	GEOTEXTILES		X		X	X			2	X					ERM QEM	8/25/93	ASAP	ASAP	8/25/93	APPROVED 8/30/93					
	SPMR-027	02700	1.03	EROSION CONTROL (SILT FENCE FABRIC)		X		X	X			2						ERM QEM	10/4/93	10/11/93	10/15/93							
	SPMR-028	02900	1.03.A	OFFSITE TRANSPORTATION AND DISPOSAL (INSURANCES, PERMITS)						X	X	2						ERM QEM	10/11/93	10/15/93	10/18/93							
	SPMR-029	02900	1.03.B 1.03.C	OFFSITE TRANSPORTATION AND DISPOSAL (WEIGHT TICKETS, MANIFESTS)						X	X	2						ERM QEM	PER OCCUR- RENCE									PER OCCURRENCE
	SPMR-030	03200	1.05.A	CONCRETE REINFORCEMENT	X						X	2	X					ERM QEM	9/9/93	9/9/93	ASAP	9/9/93	APPROVED 9/14/93					
	SPMR-031	03250	1.03	CONCRETE JOINT ACCESSORIES (WATERSTOPS)						X		2	X					ERM QEM	9/7/93	9/9/93	ASAP	9/9/93	APPROVED CONF. CALL WITH TRUSTEES 9/20/93					VERBAL APPROVAL GIVEN DURING CONF. CALL
	SPMR-032	01390	ALL	CONTRACTOR HEALTH AND SAFETY PLAN/CONTINGENCY AND EMERGENCY RESPONSE								2	X	X				USEPA IDDM	8/12/93	8/26/93		8/12/93	APPROVED 9/23/93 K. VENO LETTER					FOR APPROVAL BY USEPA AND IDDM
	SPMR-033	01392	ALL	LABORATORY QUALITY ASSURANCE PLAN								2	X	X				USEPA IDDM	8/12/93	8/26/93		8/12/93	APPROVED 8/23/93 K. VENO LETTER					FOR APPROVAL BY USEPA AND IDDM

BY: JR FIFE

TITLE: RESIDENT SUPERINTENDENT

DISTRIBUTION: 1. ECC TRUST'S ENGINEER 2. CONTRACTOR QC MANAGER 3. INDEPENDENT CQA OFFICER 4. DESIGN ENGINEER

**ECC SUPERFUND SITE
SITE PREPARATION & MATERIAL REMOVAL
ZIONSVILLE, INDIANA**

SUBMITTAL REGISTER
REGISTER NO. SPMR (REVISED 9/24/93)

DATE REC'D.	TRANS-MITTAL NO.	SPECIFICATION IDENTIFICATION (ITEM NO.)	SPECIFICATION PARAGRAPH NUMBER	DESCRIPTION OF SUBMITTAL	TYPE OF SUBMITTAL							NO. COPIES REC'D.	ACTIONS					ACTION ELEMENT	CONTRACTOR SCHEDULE DATES			INDEPENDENT QSA-OFFICER ACTION DATES		DESIGN ENGINEER ACTION DATES		REMARKS
					DRAWING	SAMPLE	GUARAN	MFO DATA	CERTIF	TEST	OTHER		NO EXCEPTIONS TAKEN	MAKE CORREC-TIONS NOTED	REVISE AND RESUBMIT	REJECTED	TECH REVIEW BY		SUBMIT	APPROVAL NEEDED BY	MATERIAL NEEDED BY	SUBMITTED TO INDEPENDENT QSA-OFFICER	ACTION	SUBMITTED TO DESIGN ENGINEER	ACTION	
	SPMR-034	01400	ALL	CONTRACTOR QUALITY CONTROL PLAN							PLAN	2	X					USEPA IOEM	8/12/93	8/26/93	—	8/12/93	APPROVED 8/27/93 K. VENTR LETTER	—	—	FOR APPROVAL BY US EPA AND IOEM
	SPMR-035	NOT	USED																							
	SPMR-036	CONTRACT	ARTICLE B.2	SCHEDULE OF VALUES							X	2						ERM QEM	8/13/93	—	—	8/13/93				
	SPMR-037	03300	ALL	CAST-IN-PLACE CONCRETE (CONCRETE MIX DESIGN)							Y O I D															WE WILL USE CONCRETE MIX DESIGN AS PER TECH. SPECS.
	SPMR-038	02180	ALL	MANHOLE CAST IRON COMPONENTS NEENAH FOUNDRY ITEMS							X	X	2	X				ERM QEM	9/9/93	9/9/93	ASAP	1/7/93	APPROVED CONF. CALL W/ TRUSTEES 9/20/93	—	—	NEENAH ITEMS ARE EQUAL TO THOSE ITEM IN TECH. SPECS.
	SPMR-039	03300	2.01.B	CAST-IN-PLACE CONCRETE (HIGH EARLY STRENGTH CEMENT, ASTM C-150, TYPE III)							X	2	X					ERM QEM	9/20/93	9/21/93	ASAP	9/20/93	9/21/93	—	—	
PROJECT RECORD																										

BY: J R FIFE TITLE: RESIDENT SUPERINTENDENT

DISTRIBUTION: 1. ECC TRUST'S ENGINEER 2. CONTRACTOR QC MANAGER 3. INDEPENDENT CQA OFFICER 4. DESIGN ENGINEER

E

October 18, 1993

PROJECT RECORD

RE: NICOLON Style S1000
 ORDER # 4063
 QUANTITY: 2000 Sq.Yd.
 SHIP DATE: October 18, 1993
 PROJECT NAME : Old Northside Landfil
 CUSTOMER ORDER #: HT-31805
 JOB #: 8499
 BILL OF LADING: 2245,2246

Ms. Colleen Murphy
 SLT North America
 200 S. Trade Ctr. Pkwy.
 Conroe, TX 77385

Dear Ms. Colleen Murphy,

This is to certify that NICOLON S1000 is a 100% polypropylene nonwoven needle-punched fabric. NICOLON S1000 is resistant to degradation due to ultraviolet exposure and resists commonly encountered soil chemicals, insects, mildew and is non-biodegradable. Polypropylene is stable within a pH range of 2 to 13. NICOLON style S1000 conforms to the physical properties listed in the following table:

FABRIC PROPERTY	TEST METHOD	UNITS	M.A.R.V.
Grab Tensile	ASTM D4632	lbs.	
- MD			270
- XMD			270
Grab Elongation	ASTM D4632	%	
- MD			15
- XMD			15
Trap Tear	ASTM D4533	lbs.	
- MD			75
- XMD			75
Puncture	ASTM D4833	lbs.	110
Mullen Burst	ASTM D3786	PSI	430
AOS	ASTM D4751	US Std Sieve	70

Attached are actual test values of rolls in shipment.

Sincerely,



Marshall O. Gaddy
 Quality Control Manager

Sworn and subscribed to before me this 18th day of October, 1993.


 Notary Public Signature

My Commission Expires Aug. 8, 1997

1

15:45:59 18 OCT 1993

NO	STYLE	GRAB...	GRAB...	GRAB.	GRAB.	TRAP	TRAP.	PUNC	BURST	AOS
		TENSILE	TENSILE	ELONG	ELONG	TEAR	TEAR	TURE		
		MACH	XMACH	MACH	XMACH	MACH	XMACH			
		DIR	DIR	DIR	DIR	DIR	DIR			

43	S1000	351	369	81	89	120	131	176	613	100
44	S1000	351	369	81	89	120	131	176	613	100

s Processed

PROJECT RECORD

CONSPEC

Marketing & Manufacturing Co., Inc.

636 South 66th Terrace
Kansas City, Kansas 66111
Telephone (913) 287-1700
Toll-Free (800) 348-7351

October 12, 1993

AWD Technologies
Penn Center West
Building 3
Suite 300
Pittsburgh, PA 15276Reference: Enviro-Chem Site
Decontamination Pad
Zionsville, IN

To Whom It May Concern:

As the formulator & manufacturer of Unikote Cure & Seal, Conspec Marketing & Manufacturing Co., Inc. certifies that Unikote Cure & Seal is a styrene acrylate membrane forming curing & sealing compound. After application and solvent evaporation material will represent solid thermoplastic resin film that is not soluble in water and can not be affected by water or affect water in any way.

Respectfully,

CONSPEC MARKETING & MANUFACTURING CO., INC.

Elizabeth B. Maday
President

adt

#1022

PROJECT RECORD

RTIN MARIETTA AGGREGATES

CENTRAL DIVISION
DISTRICT OFFICE
6340 CASTLEPLACE DRIVE
INDIANAPOLIS, INDIANA 46250
TELEPHONE (317) 842-0744

September 25, 1993

AWD Tech.

Our material meets INDOT specifications.

53 stone

Bob Cheek

Bob Cheek
Sales Rep.

PROJECT RECORD

#2 Stone
ID # Gradation

Bob Cheek (cur)

Bob Cheek

MARTIN MARIETTA

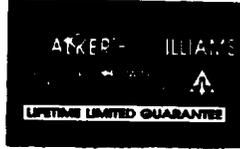
PROJECT RECORD

CALCULATION WORKSHEET

CLIENT:	FILE NO.	BY	PAGE
SUBJECT: LOMBER CERTS		PREPARED BY	DATE

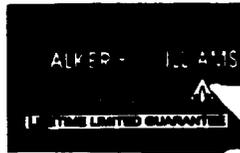
ITEM- 1327674 2x4-12' 82

 0 87100 01672 8



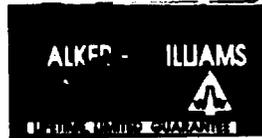
ITEM- 1327844 2x6-16' 81

 0 87100 01730 5



ITEM- 2x6-14' 82

 0 87100 02500 3



ITEM- 1327771 2x4-10' 81

 0 87100 01724 4



ITEM- 1327623 2x4 X 87

 0 87100 01668 1



PROJECT RECORD



INDEPENDENT CONCRETE PIPE CORPORATION

MANUFACTURERS OF

REINFORCED CONCRETE CULVERT, SEWER PIPE, MANHOLES AND BOX CULVERTS

(For Over 70 Years)

Date 10/5/93

CONTRACTOR: AWD

PROJECT RECORD

RE: ENVIRO-CHEM
To Whom It May Concern:

This letter is to certify that the material furnished to the above referenced job will conform to the following specifications.

- | | |
|-------------|------------|
| 1. R.C.P. V | ASTM C-76 |
| 2. JOINTS | ASTM C-443 |
| 3. | ASTM |
| 4. | ASTM |
| 5. | ASTM |

Independent Concrete Pipe Corporation

MIKE MEGAL
PLANT SUPERINTENDENT, INDPLS.

State: IN
City: INDIANAPOLIS
County: MARION

Subscribed and sworn to before me this 6th day of October, 1993.

Notary Public Paul R. Wissler My commission expires 6/7/97
Paul R. Wissler

MAIN OFFICE & PLANT
2050 SOUTH HARDING STREET
P.O. BOX 21007
PHONE 317-262-4920
FAX 317-262-4926
INDIANAPOLIS, IN 46221

MISHAWAKA PLANT
401 SO. BEIGER STREET
MISHAWAKA, INDIANA 46544
PHONE 219-259-6401
FAX 219-258-2704

MAXWELL PLANT
8 JUNCTION ST
MAXWELL, IN 46154
PHONE 317-326-2600
FAX 317-326-4185



January 19, 1994

Mr. Jim Fife
AWD Technologies
Penn Center West
Building 111, Suite 300
Pittsburg, PA 15276

RE: Enviro-Chem Wastewater Pad Liner and Sump

Dear Mr. Fife:

This letter and the enclosed test reports are to serve as certification that the above project was installed and tested in accordance with the project specifications.

The project was completed October 23, 1993. If you have any questions please call.

Sincerely,

A handwritten signature in cursive script, appearing to read "Lee Taylor".

Lee Taylor, President
Taylor Construction Services, Inc.

PROJECT RECORD

X SEE PRINT
INSIDE FOLDER
FOR AS BUILT

TAYLOR CONSTRUCTION SERVICES, INC.
CERTIFICATE OF ACCEPTANCE
OF SOIL SUBGRADE SURFACE

PROJECT NAME: ENVIROCHEM
PROJECT NUMBER: 2396 - 008
OWNER: ENVIROCHEM TRUSTEES
LOCATION: 485 S. 175 421 ZIONSVILLE TN

I, the undersigned, a duly appointed representative of Taylor Construction Services (TCS), have visually observed the soil subgrade surface describe below, and found it to be an acceptable surface on which to install geomembrane.

This certificate is based on observations of the surface of the subgrade only. No subterranean inspections or tests have been performed by Taylor Construction Services, and TCS makes no representations or warranties regarding conditions which may exist below the surface of the subgrade. Taylor Construction Services accepts no responsibility for conformance of the subgrade to this project's specifications.

Area Being Accepted: WASTE WATER STORAGE PAD

TAYLOR CONSTRUCTION REPRESENTATIVE:

PROJECT RECORD

Date: 10-23-93
Signature: Terry L Holden
Name: TERRY L HOLDEN
Title: C O P TELH

OWNERS REPRESENTATIVE:

Date: 10/23/93
Signature: Scott Weishaar
Name: SCOTT WEISHAAR
Title: QUALITY CONTROL MANAGER
Company: AWD TECHNOLOGIES

NON-DESTRUCTIVE TESTING FORM

PROJECT NAME: ENVIROCHEM

PROJECT NUMBER: 2396-008

MATERIAL DESCRIPTION: 60MIL HDPE

DATE/ TIME	SEAM NO.	TESTER INITIAL	AIR TESTING						VBOX P/F	LOCATION/COMMENTS
			PRESSURE			TIME				
			START	END	+/-	START	END	P/F		
10-23-93	1	TLH	32	31	-1	08:48	08:53	P		NORTH SIDE 1 ST SHEET
	2	TLH	32	32	-	9:05	9:10	P		

PROJECT RECORD

PANEL PLACEMENT FORM

PROJECT NAME: ENVIROCHEM

PROJECT NUMBER: 2396-DB MATERIAL DESCRIPTION: 60 MIL HDPE

DATE/ TIME	PANEL NUMBER	ROLL NUMBER	PANEL LENGTH	PANEL WIDTH	COMMENTS/ PANEL LOCATION
	15	01	55'	9'	NORTH SIDE OF DRAINAGE DITCH
	25	01	55'	15'	CENTER
	35	01	55'	9'	SOUTH SIDE

PROJECT RECORD

DESTRUCTIVE TEST LOG

PROJECT NAME: _____

PROJECT NUMBER: _____

MATERIAL DESCRIPTION: _____

DATE	SAMPLE I.D.	SEAM NO.	MACHI NO.	SEAMER INITIALS	PEEL VALUES LBS./INCH				PASS/ FAIL	DATE TO LAB PKG.SLIP NO.	LAB PASS/ FAIL	LOCATION/ COMMENTS
10-23-93	S-1	25-3s	1510	JWM	150	142	147		P	ENVIROX 1A-21		

PROJECT RECORD

PANEL SEAMING FORM

PROJECT NAME:

PROJECT NUMBER:

MATERIAL DESCRIPTION:

DATE/TIME	SEAM NUMBER	PANEL NUMBERS	SEAM LENGTH	SEAMER INITIALS	MACHINE NUMBER	TEMP SETTING	WEATHER	AMBIENT TEMP	DES TEST P/F	COMMENTS
10-23-93 08:40	1	2s-2s	60'	JWM	1510	700°	Clear	45°	P	
10-23-93 09:05	2	2s-3s	60'	JWM	1510	700°	?	45°	P	

PROJECT RECORD

TCS

TAYLOR CONSTRUCTION SERVICES

REPAIR REPORT

PAGE ___ OF ___

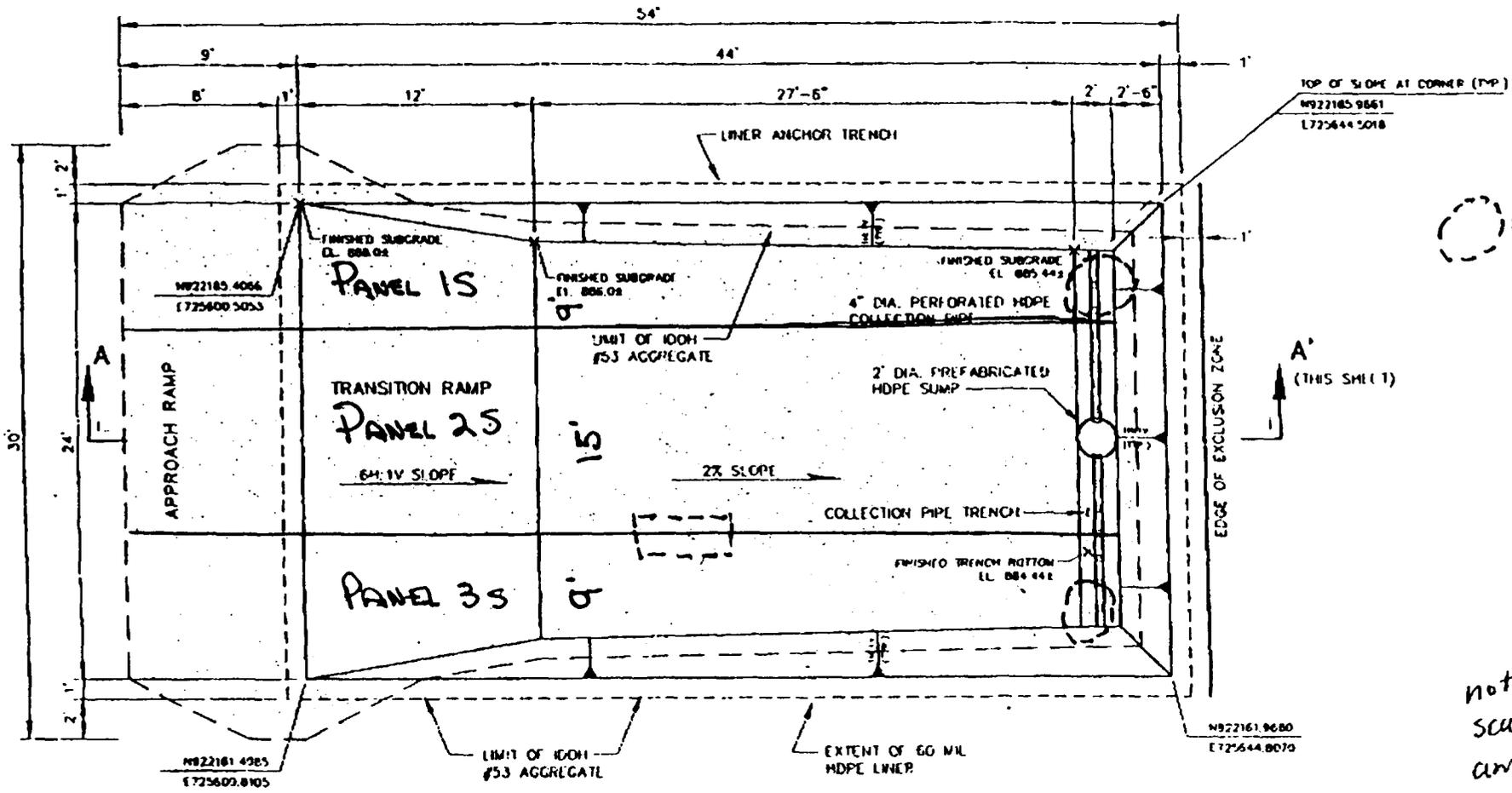
PROJECT NAME:

PROJECT NUMBER:

MATERIAL DESCRIPTION:

FIELD SEAM#	PANEL NO.	REPAIR DATE	REPAIR CREW	MACHINE NUMBER	TEST DATE	TEST CREW	TEST P/F	LOCATION/COMMENTS
2	25-35	10-23-93	RP TLN JWM	10889531	10-23-93	TLN	P	14' x 24" TRENCH - 6' - 8' FROM SOUTH TRENCH. RESPECTIVE TEST PANEL
1	15	10-23-93	RP TLN JWM	10889531	?	?	P →	50" x 24" TO REVERSE CORNER
3	35	10-23-93	?	?	?	?	P →	SAME AS ABOVE

PROJECT RECORD



○ = PATCH

Not to scale anymore

NOTE
 MAXIMUM CAPACITY OF A WASTEWATER STORAGE TANKER TRUCK = 8,000 GALLONS.

13
 C-3
WASTEWATER STORAGE PAD PLAN
 SCALE: 1" = 5'



SURVEY CONTROL INFORMATION

VERTICAL AND HORIZONTAL CONTROL STATIONS FOR CONSTRUCTION LAYOUT HAVE BEEN LOCATED BY SOMMERICH ENG. CORP.

HORIZONTAL DATUM IS BASED ON INDIANA STATE PLANE COORDINATE SYSTEM, WEST ZONE - 1927 AND VERTICAL DATUM IS NGVD - 1929.

VERTICAL

TBM #2 RAILROAD SPIKE IN NORTHWEST SIDE OF UTILITY POLE AT THE SOUTHWEST CORNER OF TAYLOR ROAD AND 115' EAST TAYLOR ROAD.

HORIZONTAL

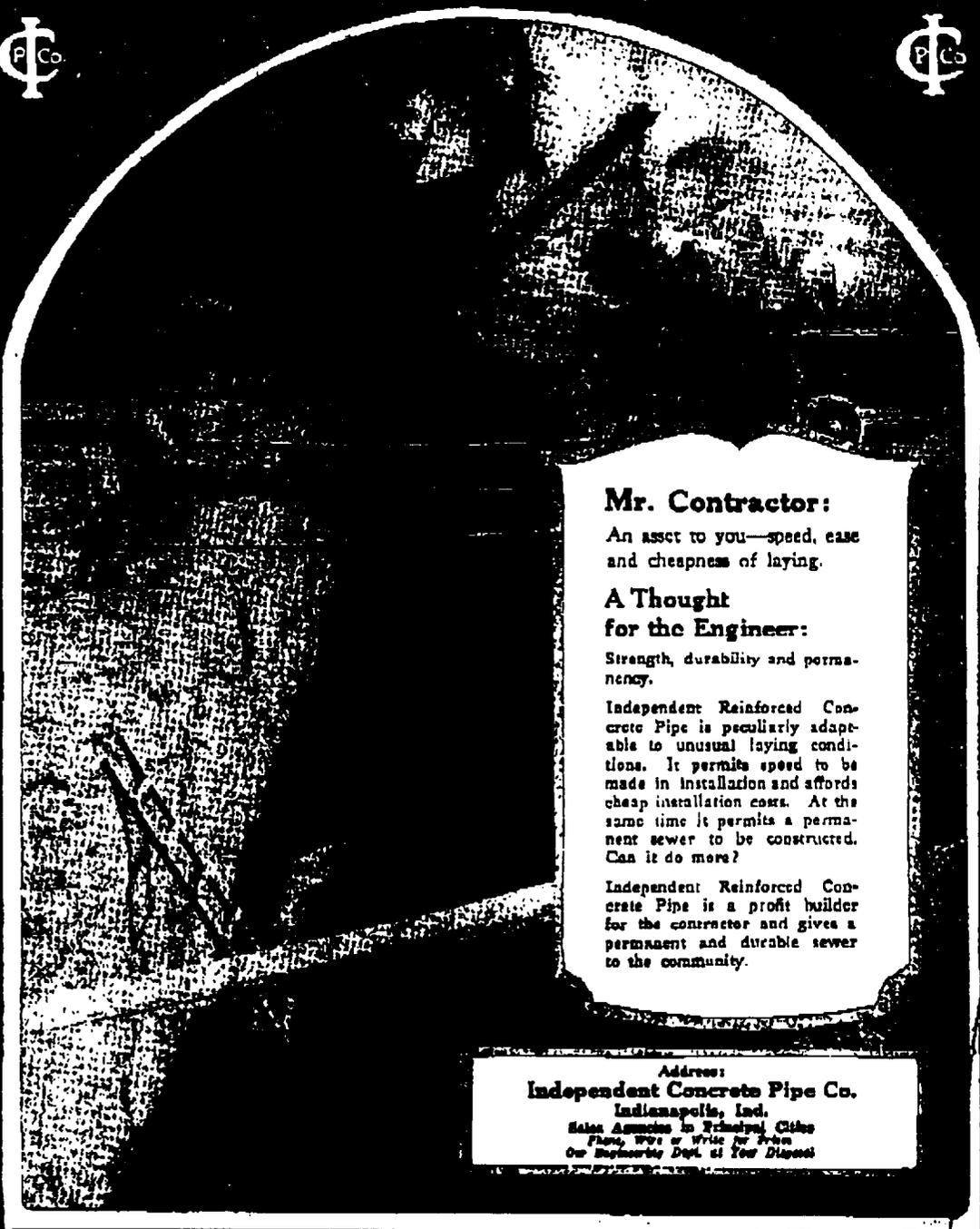
CP1010: 1/2" REBAR OF U.S. 421 AND 715' TAYLOR ROAD (AS MEAS. U.S. 421) NORTHING 9.

CP1011: 5/8" REBAR OF U.S. 421 AND 155' COUNTY ROAD 100 SIX CENTRALINE OF U.S. 421 EASTING 725,260.66

Taylor Construction Services, Inc.
 103 E. Lincoln Street
 Danville, Indiana 46122
 " AS BUILT " 10-23-93

PROJECT RECORD

INDEPENDENT



Mr. Contractor:

An asset to you—speed, ease and cheapness of laying.

A Thought for the Engineer:

Strength, durability and permanency.

Independent Reinforced Concrete Pipe is peculiarly adaptable to unusual laying conditions. It permits speed to be made in installation and affords cheap installation costs. At the same time it permits a permanent sewer to be constructed. Can it do more?

Independent Reinforced Concrete Pipe is a profit builder for the contractor and gives a permanent and durable sewer to the community.

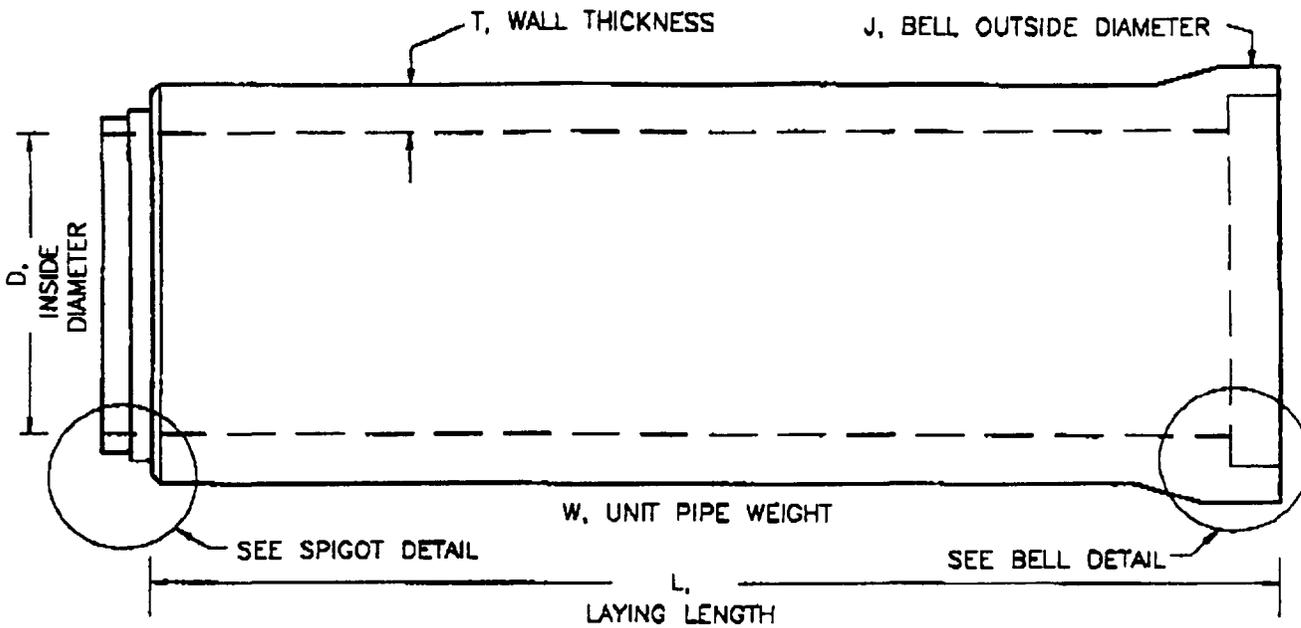
Address:
Independent Concrete Pipe Co.
 Indianapolis, Ind.
 Sales Agencies in Principal Cities
 Plans, Specs or Write for Prices
 Our Engineering Dept. at Your Disposal

CONCRETE PIPE

Appearing July 23, 1925 Issue Engineering News Record

PROJECT RECORD

CLASS V R.C.P.



NOTES: ALL REINFORCED CONCRETE PIPE MATERIALS, MANUFACTURE, AND TESTING PROCEDURES SHALL BE IN ACCORDANCE TO CURRENT A.S.T.M. C-76, C-655, OR DIRECT DESIGN STANDARDS.
 ALL PIPE TO BE USED ON SANITARY SEWER APPLICATION PROJECTS WILL BE VACUUM OR HYDROSTATICALLY TESTED TO THE I.C.P.C. CRITERIA.

D (IN.)	T (IN.)	L (FT.)	J (IN.)	W (LB./FT.)
12	c+ 27/8	8	20 1/4	148
18	c+ 35/8	8	28	246
30	c 4 1/4	8	42 1/2	476

SEE SHEET PD-8 FOR STEEL DESIGN AND D-LOAD FOR PIPE TO BE FURNISHED

ENVIRO-CHEM PROJECT

INDEPENDENT CONCRETE PIPE CORPORATION
 INDIANAPOLIS - KISHAWAKA - MAXWELL

INDIANAPOLIS PLANT
 2050 SOUTH HARDING STREET
 P.O. BOX 21007
 INDIANAPOLIS, IN 46221
 PHONE 317-282-4920
 FAX 317-282-4926



TITLE:

TYPICAL PIPE DETAIL
 SINGLE OFFSET SPIGOT
 FOR PROFILE GASKET OR
 MASTIC JOINT
 SPECIAL PROJECT/DESIGN

DATE:

3/1/91

SCALE:

N.T.S.

NUMBER:

PD-11

PROJECT RECORD

CLASS V R.C.P.

REINFORCED CONCRETE PIPE REINFORCEMENT

REINFORCING STEEL SHALL BE HIGH STRENGTH WIRE WITH A MINIMUM TENSILE YEILD OF 80,000 P.S.I. AREA AND PLACEMENT SHALL BE IN ACCORDANCE TO A.S.T.M. C-76 AND C-655 AND AS SHOWN BELOW.

DIA. (IN.)	D-LOAD .01" (#/LN.FT./DIA.FT.)	INSIDE AREA (IN. ² /LN.FT.)	OUTSIDE AREA (IN. ² /LN.FT.)
12	3000	0.07	---
18	3000	0.10	---
30	3000	0.18	0.11

ENVIRO-CHEM PROJECT

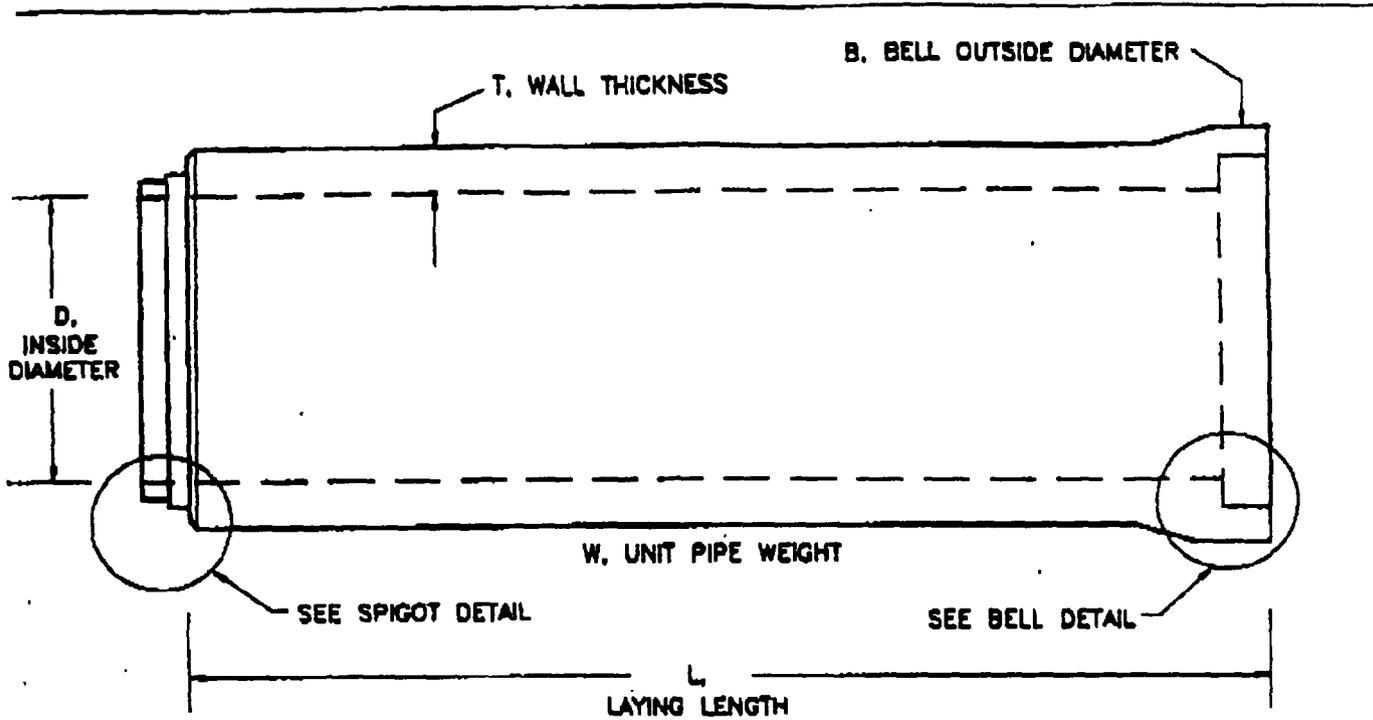
INDEPENDENT CONCRETE PIPE CORPORATION
 INDIANAPOLIS - MISHAWAKA - MAXWELL
 INDIANAPOLIS PLANT
 2050 SOUTH HARDING STREET
 P.O. BOX 21007
 INDIANAPOLIS, IN 46221
 PHONE 317-262-4920
 FAX 317-262-4926



TITLE:
**SPECIFIC PIPE DETAILS
 STEEL DESIGN**

DATE:
 3/1/91
 SCALE:
 N.T.S.
 NUMBER:
 PD-8

PROJECT RECORD



NOTES:

ALL REINFORCED CONCRETE PIPE MATERIALS, MANUFACTURE, AND TESTING PROCEDURES SHALL BE IN ACCORDANCE TO CURRENT A.S.T.M. C-76, C-855 STANDARDS OR AS SPECIFIED.

ALL PIPE TO BE USED ON SANITARY SEWER APPLICATION PROJECTS WILL BE VACUUM OR HYDROSTATICALLY TESTED TO THE I.C.P.C. CRITERIA.

D (IN.)	T (IN.)	L (FT.)	B (IN.)	W (LB./FT.)
12	B 2	8	20 1/4	99
*	C 2 7/8			148
15	B 2 1/4	8	23 7/8	144
	C 3			176
18	B 2 1/2	8	28	188
*	C 3 5/8			246
21	C 3 3/4	8	31 5/8	304
24	C 3 3/4	8	35 1/2	366
27	C 4	8	39	420
* 30	C 4 1/4	8	42 1/2	476
33	C	8		552
36	C 4 3/4	8	50 1/4	633

DEPENDENT CONCRETE PIPE CORPORATION

Indianapolis Plant
 8050 S. Harding St.
 P.O. Box 21007
 Indianapolis, IN 46221
 -282-4920



TITLE

TYPICAL PIPE DETAIL
 SINGLE OFFSET SPIGOT
 FOR PROFILE GASKET OR
 MASTIC JOINT
 12" - 36" DIAMETER

DRAWN

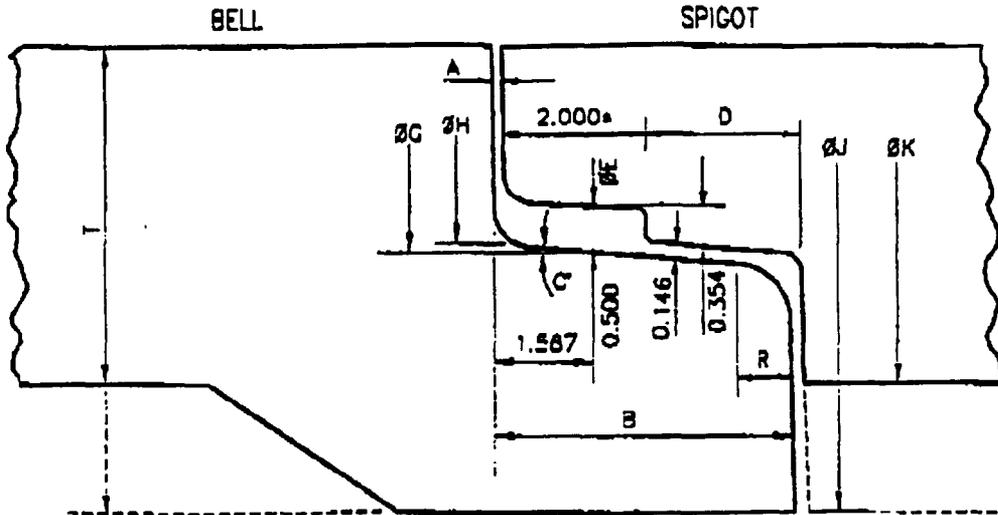
DATE

REVISIONS

NUMBER

PROJECT RECORD

* DIMENSION IS 2.157 FOR 54" Ø AND LARGER



NOTE: SMOOTH WALL JOINT FOR 48" Ø AND LARGER (ØJ = ØK).

DIA.	WALL T	SPIGOT						BELL				
		ØK	A	D	ØE	R	ØH	ØJ	E	ØK	C	
12	B 2	16.0	.125	1.800	14.338	.750	15.228	20 1/4	3 5/8	15.335	2	
	C+2 7/8	17 3/4	.125	1.500	14.335	.750	15.228	20 1/4	3 5/8	15.335	2	
15	B 2 1/4	19 1/2	.157	1.468	17.831	.750	18.722	23 7/8	3 5/8	18.831	2	
	C 3	21	.157	1.468	17.831	.750	18.722	23 7/8	3 5/8	18.831	2	
18	B 2 1/2	23.0	.157	1.468	21.211	.750	22.102	28.099	3 5/8	22.211	2	
	C+3 5/8	25 1/4	.157	1.468	21.211	.750	22.102	28.099	3 5/8	22.211	2	
21	C+3 3/4	28 1/8	.125	1.718	24.711	.875	25.802	31 5/8	3 7/8	28.711	2	
24	C 3 3/4	31 1/2	.157	1.718	28.086	.875	28.877	35 1/2	3 7/8	29.086	2	
27	C 4	35.0	.127	1.843	31.878	1.000	32.467	38.000	4.000	32.578	2	
30	C 4 1/4	38 1/2	.157	1.843	35.086	.875	35.877	42 1/2	4.000	38.086	2	
33	C 4 1/2	42.0	.157	1.858	38.588	1.250	39.480	46 1/4	4 1/8	39.588	2	
36	C 4 3/4	45 1/2	.125	2.000	42.047	1.000	42.938	50 1/4	4 1/8	43.047	2	
42	B 4 1/2	51.0	.157	1.843	46.390	.875	46.281	51 1/4	4.000	46.390	2	
48	B 5	58.0	.157	1.843	51.890	.875	52.781	58.000	4.000	52.890	2	
54	B 5 1/2	65.0	.000	2.843	57.818	.875	58.708	65.000	5.000	58.818	2	
60	B 6	72.0	.000	2.843	64.318	.875	65.208	72.000	5.000	65.318	2	
66	B 6 1/2	78.0	.000	2.843	70.484	1.250	71.375	78.000	5.000	71.484	2	
72	B 7	88.0	.000	2.843	78.984	1.250	77.875	88.000	5.000	77.984	2	

DIMENSIONS MAY BE REVISED WITHOUT NOTICE.

INDEPENDENT CONCRETE PIPE CORPORATION

INDIANAPOLIS - MISHAWAKA - MAXWELL

INDIANAPOLIS PLANT
2530 SOUTH HARDING STREET
P.O. BOX 21007
INDIANAPOLIS, IN 46221
PHONE 317-282-4920
FAX 317-282-4925



TITLE:

TYPICAL JOINT DETAIL
SINGLE OFFSET SPIGOT
FOR PROFILE GASKET
12"-72" DIAMETER

DATE:

11/14/91

SCALE:

N.T.S.

NUMBER:

JD-1

PROJECT RECORD

INVENTORY

NSC

GEOMEMBRANE CERTIFICATION

Customer: Taylor Construction Services

Ship Date: 12-31-91

Project: Danville, IN

Number of Rolls Shipped: 1

Order Number: 168-12

Nominal Thickness: 60 mil

We hereby certify that the resin and polyethylene geomembrane for the above identified shipment, meets or exceeds National Seal Company's specifications, attached, and NSF Standard 54 specifications for HDPE geomembrane. The tests listed below in the resin specifications have been performed on each batch of resin. The tests listed below in the geomembrane specifications have been performed at least every 50,000 square feet of geomembrane.

RESIN SPECIFICATIONS

Melt Flow Index	1.0 Maximum
Density	0.94 Minimum
Carbon Black Content	2.0 to 3.0

GEOMEMBRANE SPECIFICATIONS

Thickness	60 mil Minimum
Stress at Yield	2200 psi Minimum
Stress at Break	3800 psi Minimum
Strain at Yield	13% Minimum
Strain at Break	700% Minimum
Carbon Black Dispersion	A1 or A2



Jane Allen
Quality Control Manager

1-10-92
Date

PROJECT RECORD

INVENTORY

NSC

January 9, 1992

POLYETHYLENE RESIN CERTIFICATE OF ANALYSIS

Customer: Taylor Construction Services

Resin Type: G36-24-149

Project: Danville, IN

Order Number: 168-12

The polyethylene resin referenced above was tested for melt flow index, density and carbon black content. Melt flow index was determined according to ASTM D 1238. Density was determined according to ASTM D 1505. Carbon black content was determined according to ASTM D 1603. The average test results are reported below.

Resin Blend Number	915C
Melt Flow Index (g/10 min)	0.27
Density (g/cm ³)	0.948
Carbon Black Content (percent)	2.28



Jane Allen
Quality Control Manager

PROJECT RECORD

I. NEWTON

NSC

January 9, 1992

GEOMEMBRANE CERTIFICATE OF ANALYSIS

Customer: Taylor Construction Services

Number of Rolls Shipped: 1

Project: Danville, IN

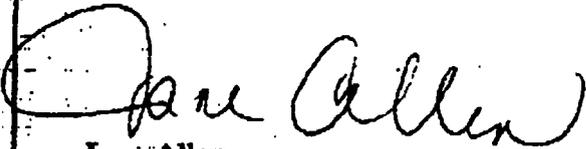
Number of Rolls Tested: 1

Order Number: 168-12

Nominal Thickness: 60 mil

The geomembrane referenced above was tested for thickness, tensile properties, carbon black dispersion and dimensional stability. Thickness was tested according to ASTM D 751. Tensile properties were tested according to ASTM D 638 using a type IV dumbbell specimen, a strain rate of two inches per minute and grip movement for strain determinations. Carbon black dispersion slides were prepared according to ASTM D 3015 and rated according to the ASTM D 2663 classification chart when viewed under 100X magnification. Dimensional stability was determined according to ASTM D 1204 at 100°C for one hour. The raw polymeric material is first quality polyethylene resin containing no more than 2% clean recycled polymer by weight. The average test results are reported below.

Roll Number	S6L-915C-L2006-B1	
Thickness (mils)		61.7
Stress at Yield (psi)	MD	2290
	TD	2390
Stress at Break (psi)	MD	5100
	TD	5210
Strain at Yield (percent)	MD	18.1
	TD	16.6
Strain at Break (percent)	MD	918
	TD	1020
Carbon Black Dispersion		A1
Dimensional Stability	MD	-0.6
	TD	0.0


 Jane Allen
 Quality Control Manager

PROJECT RECORD

Master-Halco, Inc.

765 E. 34TH STREET, INDIANAPOLIS, IN 46226 • TELEPHONE: (317) 645-1303

FEBRUARY 18, 1994

THE HOOSIER COMPANY, INC.
HIGHWAY SAFETY DIVISION
ATTN: JAMES RIVELLI
6421 WEST 86TH STREET
INDIANAPOLIS, IN 46268

PROJECT RECORD

RE: MATERIAL FOR 73-6905 (AWD TECH/ZIONSVILLE LAND FILL)

JIM:

MASTER-HALCO, INC. IS A NATIONWIDE MANUFACTURER AND DISTRIBUTOR OF FENCING PRODUCTS. THE MATERIALS SUPPLIED FOR THE ABOVE NAMED PROJECT WILL CONFORM TO THE FOLLOWING SPECIFICATIONS:

1. CHAINLINK FENCE FABRIC - RR-F-191/1D TYPE 1
2" MESH, 9 GAUGE (.148) WIRE, 1.2 OZ OF ZINC
PER SQUARE FOOT.
2. FENCE POST AND RAILS - RR-F-191/3D CLASS 1
GRADE A, SCHEDULE 40, 1.8 OZ OF ZINC PER SQUARE
FOOT.
3. FENCE FITTINGS AND ACCESSORIES - RR-F-191/4D
ALL GALVANIZED PRESSED STEEL FITTINGS WITH 1.2
OZ OF ZINC PER SQUARE FOOT.

IF YOU HAVE ANY ADDITIONAL QUESTIONS, PLEASE DO NOT HESITATE TO
GIVE ME A CALL.

SINCERELY,



BRAD KNEPPER
MASTER-HALCO, INC.

MASTER HALCO

CORPORATE OFFICE: POST OFFICE BOX 366, 110 EAST LA HABRA BOULEVARD, LA HABRA, CALIFORNIA 90631 • (213) 694-5066

CONSTRUCTION PRODUCTS FOR THE 21ST CENTURY™

NUTEC Nonwoven Silt Fence

Sediment loading can be controlled in creeks, streams, lakes, highways and storm sewer inlets. With new federal N.P.D.E.S. regulations in place, retaining sediment on site is now more critical than ever. Nutec offers prefabricated silt fences for several different applications. Nutec silt fences meet Task Force 25 requirements.

Since straw bales must be trenched in to perform correctly, silt fences have become a less expensive and more effective method for controlling silt migration. Nutec nonwoven silt fences can be used as perimeter control, velocity control in swales and storm sewer inlet protectors.

Nutec has addressed the four most critical elements in any silt fence.

4. Reinforcement (optional)

When dealing with concentrated flows or large watersheds, geogrid reinforcement may be required. Nutec uses polypropylene, biaxial geogrids for reinforcement. The geogrid is also "sandwiched" between the stake and the lath. The geogrid is sewn to the geotextile along the top with a single stitch of a polythread.

1. Geotextile Selection

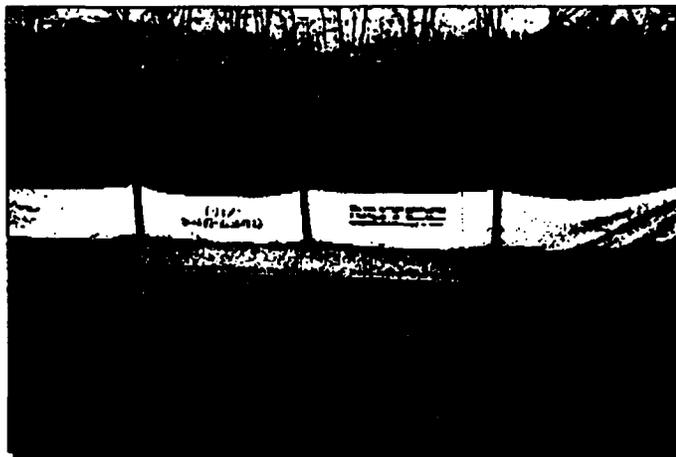
Nutec only uses polypropylene, continuous filament, needle punched, nonwoven geotextiles. Nonwoven geotextiles have proven to be superior to wovens in permeability and water flow rates. Instead of impounding water for days or weeks to drop out silts, we feel that it is better to filter the water and retain only the silt.

2. Staking System

Nutec only uses 2" x 2" hardwood stakes on our prefabricated silt fences. They perform better than 1 1/2" x 1 1/2" stakes in a wider range of soil types. They are available in 36" and 48" heights. At Nutec, we place our stakes on 5' centers, instead of 8' or 10' centers. This gives our silt fence better support in more demanding sites.

3. Fastening System

Nutec uses a 24" lath and 1 1/2" staples to affix the geotextile to the stake. This "sandwich" effect distributes point loading that may occur during a storm event. Geotextiles that are attached with only staples often rip, around the staple, and detach from the stake.



NUTEC Silt Fence flows better



NUTEC Silt Fence holds more silt



NUTEC Silt Fence cleans more water

800-969-6883

8439 East 30th St. • Indianapolis, IN • 46219 • (317) 546-6340 • FAX (317) 546-6344

PROJECT RECORD

Specifications

NW

It fence shall consist of three (3) parts:

36" wide Geotextile fabric shall be a nonwoven, continuous filament, needle-punched filter fabric machine produced from 100% polypropylene. Geotextile should be designed specifically to retain sediment and remain highly permeable to water. Desired characteristics include small pore size, high U.V. resistance, high permittivity, and a high percent of open area.

Stake shall be 2" x 2" x 36" hardwood sharpened to a point on the end. Stakes shall be placed on 5' centers.

Wood laths shall be 1/2" x 2" x 24" and will serve to prevent the Geotextile fabric from tearing away from the stakes.

Assembly

Geotextile shall be attached to wood stakes with wood laths and 1 1/2" staples. The bottom 12" of fabric shall be left unsecured to allow for entrenchment. 3NWR Silt Fence shall be manufactured by Nutec Supply or engineer approved equivalent.

Geotextile

Fabric should meet or exceed the following physical, mechanical, and hydraulic specifications.

Structure	Nonwoven		
Polymer	Polypropylene		
Weight	4.5 oz/sq. ft.		(ASTM D1777)
U.V. Resistance	> 85%		(ASTM D4355)
Permittivity	3.0 Sec-1		(ASTM D4491)
Water Flow Rate	225 GPM/Sq. Ft.		(ASTM D4491)
Trapezoidal Tear	50 lbs.		(ASTM D4632)
Grab Tensile/Elongation	125 lbs/50%		(ASTM D4632)
AOS (U.S. Sieve)	80-100		(ASTM D4751)
Puncture Resistance	60 lbs.		(ASTM D4833)

3NWR (Reinforced)

Silt fence shall consist of four (4) parts:

- 36" wide Geotextile fabric shall be a nonwoven, continuous filament, needle-punched, filter fabric machine produced from 100% polypropylene. Geotextile should be designed specifically to retain sediment and remain highly permeable to water. Desired characteristics include small pore size, high U.V. resistance, high permittivity, and a high percent of open area.
- Stake shall be 2" x 2" x 36" hardwood sharpened to a point on the end. Stakes shall be placed on 5' centers.
- Wood laths shall be 1/2" x 2" x 24" and will serve to prevent the Geotextile and Geogrid from tearing away from the stakes.
- Reinforcement shall be 24" wide Polypropylene Geogrid or engineer approved equal.

Assembly

Geogrid reinforcement shall be sewn to the Geotextile across the top with a polyester/cotton thread. Geogrid and Geotextile shall be attached to wood stakes with wood laths and 1 1/2" staples. The bottom 12" of fabric shall be left unsecured to allow for entrenchment. 3NWR Silt Fence shall be manufactured by Nutec Supply or engineer approved equivalent.

Geotextile

Fabric should meet or exceed the following physical, mechanical, and hydraulic specifications.

Structure	Nonwoven		
Polymer	Polypropylene		
Weight	4.5 oz/sq. ft.		(ASTM D1777)
U.V. Resistance	> 85%		(ASTM D4355)
Permittivity	3.0 Sec-1		(ASTM D4491)
Water Flow Rate	225 GPM/Sq. Ft.		(ASTM D4491)
Trapezoidal Tear	50 lbs.		(ASTM D4632)
Grab Tensile/Elongation	125 lbs/50%		(ASTM D4632)
AOS (U.S. Sieve)	80-100		(ASTM D4751)
Puncture Resistance	60 lbs.		(ASTM D4833)

Standard Packaging

Roll Code	Roll Length	Geotextile Width	Stakes Spacing	Lath Spacing	Staple Spacing	Roll Weight
3NW	3' X 50'	36"	36"	24"	5'	27
3NWR	3' X 50'	36"	36"	24"	5'	57
4NW	4' X 50'	48"	48"	36"	5'	37
4NWR	4' X 50'	48"	48"	36"	5'	77

Geogrid

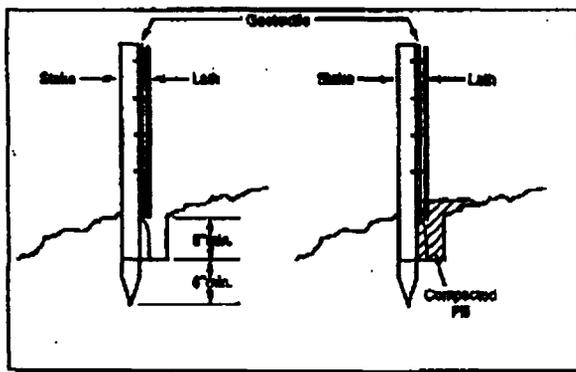
Reinforcement should meet or exceed the following physical and mechanical specifications.

Polymer	Polypropylene		
Weight	0.71 lbs/Sq. Ft.		(ASTM D1777)
Grab Tensile (MD/TD)	980/1170 lbs/Pl.		(ASTM D4575)
% Elongation (MD/TD)	29%/15%		(ASTM D4632)
Junction Strength	890/1080 lbs/Pl.		(GRI-GG2)
Junction Efficiency	90%		(GRI-GG2)

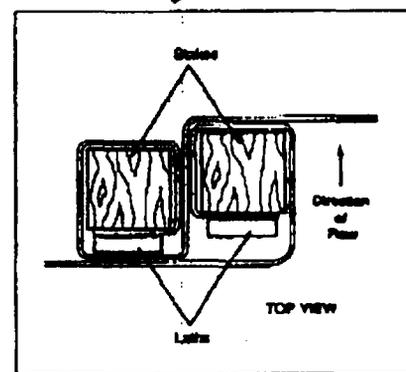
Installation

- Dig 6" deep trench along proposed fence line (a trenching machine is needed on long runs.)
- Pound stake in trench 6" - 8" or until secure. Be sure to stretch fabric taut when pounding stakes. (Note: stake must be on the downhill or downstream side of fence.)
- Drape loose end of geotextile into trench.
- Backfill and compact soil on both sides.

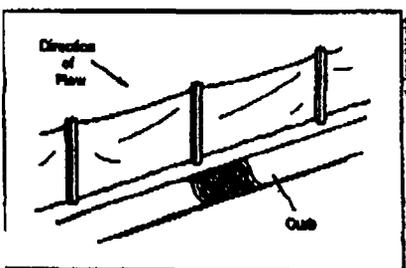
Toe-In Methods



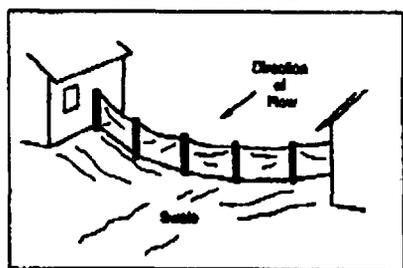
Roll Junctions



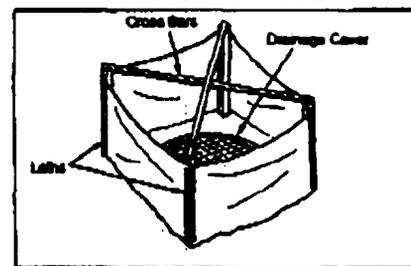
Perimeter Control



Flow Control



Inlet Protection



PROJECT RECORD

PROJECT RECORD



"CONSTRUCTION PRODUCTS FOR THE 21st CENTURY"

INDIANA DEPARTMENT OF TRANSPORTATION NON-WOVEN SILT FENCE CERTIFICATION

This letter is to certify that Nutec 3NW meets the following criteria.

STAKES.....1.5" x 1.5" x 36" Hardwood

LATHES.....5" x 1.5" x 24" Hardwood

GEOTEXTILES

Structure.....	Non-Woven	
Weight.....	4.5 oz/sys.....	(ASTM D3776)
U.V. Resistance.....	> 85%.....	(ASTM D4355)
Permittivity.....	3.0 Sec-1.....	(ASTM D4491)
Water Flow Rate.....	225 GPM/Sq.Ft.....	(ASTM D4491)
Trapezoidal Tear.....	50 Lbs.....	(ASTM D4632)
Grab Tensil/Elongation.....	125 Lbs.....	(ASTM D4632)
AOS (U.S. Sieve).....	80-40.....	(ASTM D4751)
Puncture Resistance.....	60 Lbs.....	(ASTM D4833)

Physical Specification:	Length.....	50 LF/Roll
	Height.....	36 Inches
	Weight.....	27 Lbs/Roll

The Geotextile is attached to wood stakes with wood laths and 1.5" staples.

This also certifies that 800 L.F. was supplied to the contractor, AWD TECHNOLOGIES for Contract # _____ for _____.

I understand that State and/or Federal Funds and/or services are involved in the work which this material will be used and that any misrepresentation on my part constitutes fraud.

Date

STATE OF INDIANA

COUNTY OF MARION

Company Name

Signature of Company Official

Personally before a Notary Public and for the above said State and County did appear J. Eric Spangler and sign the above Certificate.

Notary Public 800-969-6883 Commission Expires _____
6439 EAST 30th ST. • INDIANAPOLIS, IN • 46219 • (317) 546-6340 • FAX (317) 546-6344





INDEPENDENT CONCRETE PIPE CORPORATION
MANUFACTURERS OF
REINFORCED CONCRETE CULVERT, SEWER PIPE, MANHOLES AND BOX CULVERTS
(For Over 70 Years)

Date: 2/25/94

Contractor: SMOCK AND ASSOC.

PROJECT RECORD

RE: ENVIRO-CHEM

To Whom It May Concern:

This letter is to certify that the material furnished to the above referenced job will conform to the following specifications:

- | | | |
|----|-------------|------------------------------|
| 1. | 72" MANHOLE | ASTM C-478
(AASHTO M-199) |
| 2. | | ASTM |
| 3. | | ASTM |
| 4. | | ASTM |
| 5. | | ASTM |

INDEPENDENT CONCRETE PIPE CORPORATION

Mike Megel

MIKE MEGEL PLANT SUPERINTENDENT

State: IN
City: INDIANAPOLIS
County: MARION

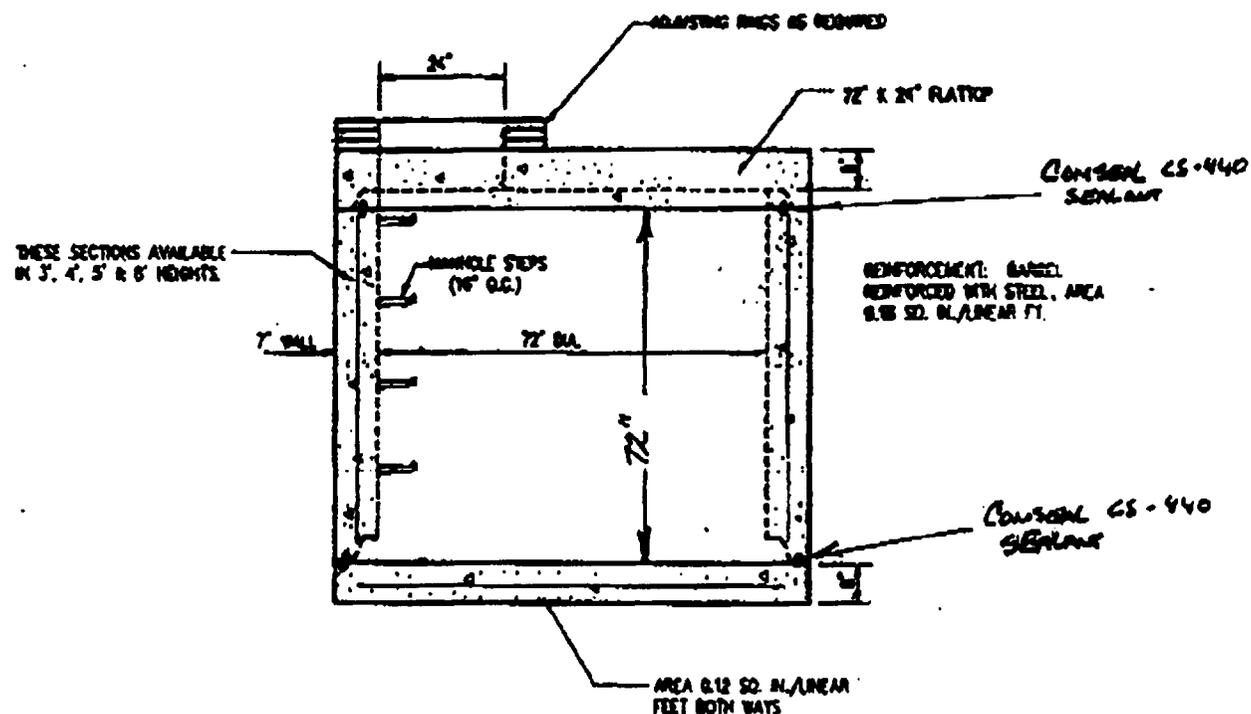
Subscribed and sworn before me this 25th day of February, 1994.

Notary Public Paul R. Wash My commission expires 6-7-1997.

MAIN OFFICE & PLANT
2020 SOUTH HAWKING STREET
P.O. BOX 21007
PHONE 317-322-4820
FAX 317-322-4828
INDIANAPOLIS, IN 46221

INDIANAPOLIS PLANT
401 SO. BERBER STREET
INDIANAPOLIS, INDIANA 46244
PHONE 317-322-5421
FAX 317-322-5704

MAXWELL PLANT
8 JUNCTION ST.
MAXWELL, IN 46184
PHONE 317-322-8800
FAX 317-322-4185



PROJECT RECORD

MANHOLE DETAIL
ENVIRO-CHEM SUPER FUND SITE

KENNETH SMOCK ASSOCIATES, INC.
2910 W. MINNESOTA STREET
INDIANAPOLIS, IN 46241
(317) 248-8371

FOR APPROVAL
9-8-93 *R. P. E.*

- NOTES: 1. MANHOLE CONFORMS TO ASTM C-478.
2. TONGUE AND GROOVE JOINT WITH MASTIC, BUTYL ROPE OR GASKETED PER ASTM C-443 AS REQUIRED.

INDEPENDENT CONCRETE PIPE CORPORATION
INDIANAPOLIS - BIRMINGHAM - BRUCELL

INDIANAPOLIS PLANT
2050 SOUTH HAWKING STREET
P.O. BOX 21007
INDIANAPOLIS, IN 46221
PHONE 317-282-4820
FAX 317-590-1094



TITLE:

72" MANHOLE TYPICAL DETAIL

DATE:

6/3/91

SCALE:

N.T.S.

NUMBER:

11477-2

Heavy Duty Trench Frames with Grated or Solid Covers

Materials: All frames and grates are furnished standard in Gray Iron, Class 35, heavy duty use. For extra heavy duty use, see page 170 for Airport Trenches.

IN STOCK

Standard Cover Dimensions

Catalog No.	Dimensions in Inches			Weight per lineal foot (without frame)					
	A	B	Grate	Type A	Type C	Type D	Type E	Type P	Frame**
8	1 1/2			19	22	19	22	25	12
10	1 1/2			24	27	29	27	31	12
12	1 1/2			28	31	40	36	37	12
14	1 1/2			33	35	52	47	45	12
17	1 1/2			39	52	55	49	-	12
20	1 1/2			54	67	70	70	-	12
23	1 1/2			60	77	85	-	-	12
26	1 1/2			71	100	85	-	-	12
30	2			100	120	100	-	-	17
33	2			110	140	150	-	-	17
36	2			120	130	185	-	-	17
39	2			130	200	180	-	-	17
45	2			150	245	210	-	-	17
51	2			190	-	215	-	-	17

** Annular spacing

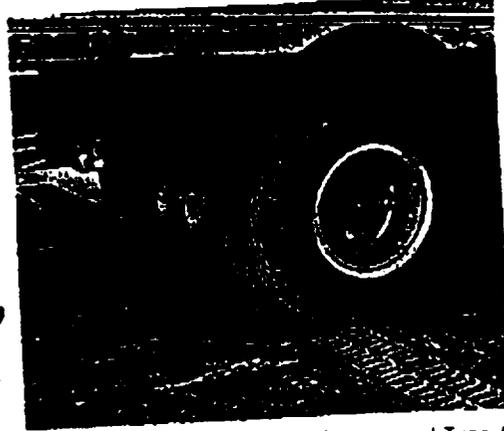
** Weight per foot - includes both sides.

Light Duty Trench Frames with Grated or Solid Covers

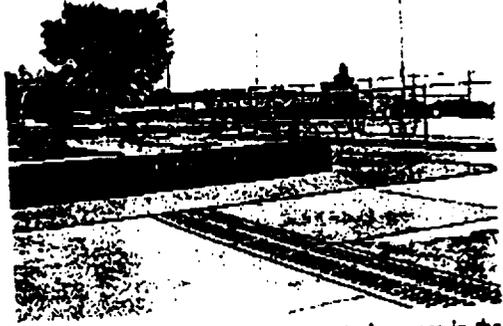
Standard Cover Dimensions

Catalog No.	Dimensions in Inches			Weight per lineal foot (without frame)					
	A	B	Grate	Type A	Type C	Type D	Type E	Type P	Frame**
8	1 1/2			12	15	22	17	-	12
10	1 1/2			14	18	28	27	-	12
12	1 1/2			13	23	34	23	-	12
14	1 1/2			16	22	27	28	-	12
17	1 1/2			29	29	37	38	-	12
20	1 1/2			41	42	42	42	-	12
23	1 1/2			51	51	55	51	-	12
26	1 1/2			44	58	65	63	-	12
29	1 1/2			71	79	74	74	-	12
32	1 1/2			52	90	86	87	-	12
35	1 1/2			120	-	100	105	-	12
38	1 1/2			95	120	110	115	-	12
44	1 1/2			115	155	120	118	-	12
50	1 1/2			135	145	105	110	-	12

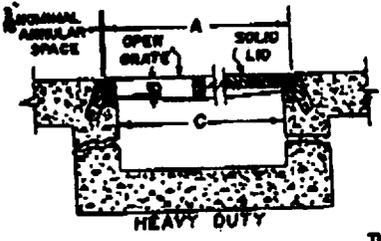
** Weight per foot - includes both sides.



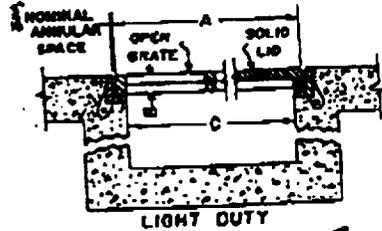
Illustrating heavy duty trench frames and Type A grates to drain loading ramp. Designs in this series are being used successfully in subway construction, intersecting elevated highways and underpasses, airport hanger doors, ramps and other special purposes.



Illustrating trench frames with grated covers in the deck area around a municipal pool.



HEAVY DUTY



LIGHT DUTY

The above schematic drawings identify basic dimensions only and do not apply to all cover designs. For grid rib depths, plate thicknesses, and seating widths, may vary on different sizes and styles. If your project has design restrictions, ask for approval drawings.

PROJECT RECORD

DMIRBACH SYR FINE SITE
ZIONSVILLE, IN
KENNETH SMOCK ASSOCIATES, INC.
 2810 W. MINNESOTA STREET,
 INDIANAPOLIS, IN 46241
 (317) 248-8371
FOR APPROVAL

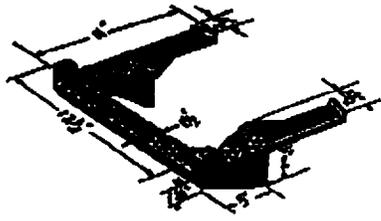
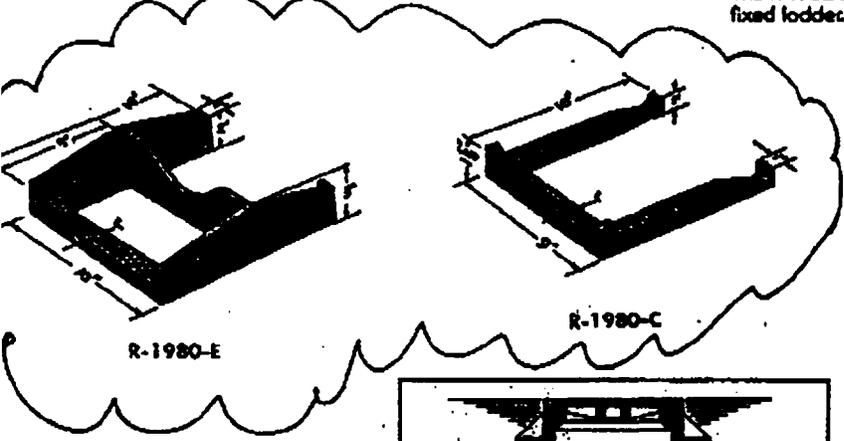


1980 - 1-2 Series Cast Iron Manhole Steps

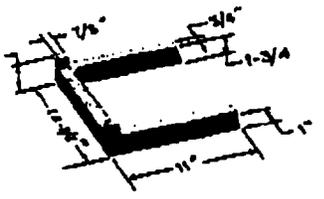
Cast iron manhole steps shown in this series are designed for use in conical shaped sanitary sewer manholes equipped with standard cast iron frames and covers.

IN STOCK

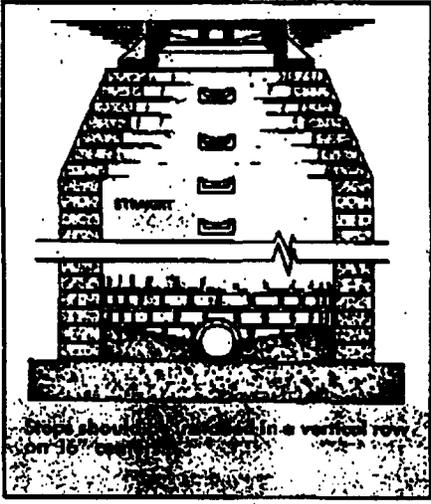
The R-1982-J and the R-1982-W steps can be used as a fixed ladder.



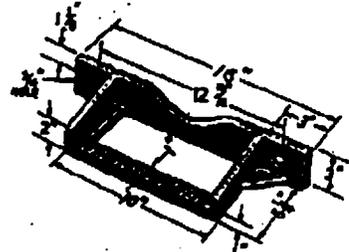
R-1980-I For Circular Walls



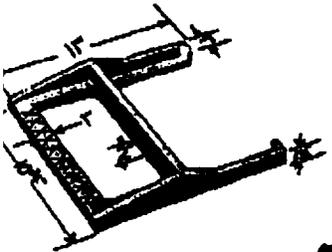
R-1980-J Heavy Construction



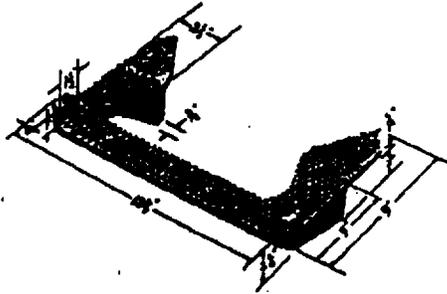
Steps should be placed in a vertical row on 15" centers.



R-1980-T For Bolting



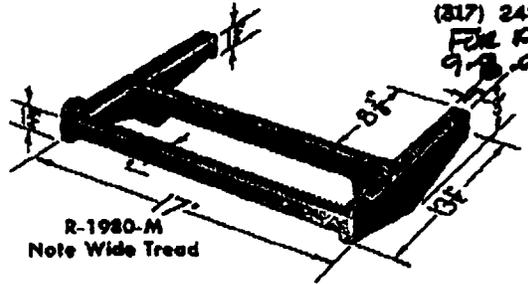
R-1980-O For Brick or Concrete



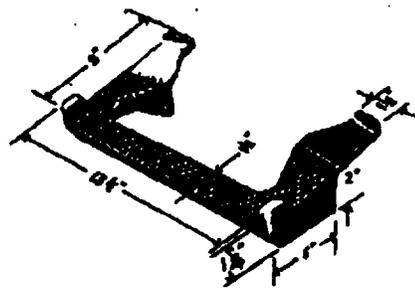
R-1981-IP For Precast Manhole

Cast iron manhole steps are manufactured from high tensile iron which has a minimum tensile strength of 35,000 lb. per square inch. Actual load tests on castings have shown a generous safety factor. Cast iron steps remain permanently in service because of their inherent corrosion resistant qualities. Cast iron steps are easily installed in concrete, brick or block manholes. The tread is scored to meet safety requirements.

*ENVIRO-CHEM SUPERFUND SITE
ZIONSVILLE, IN
KENNETH SMOCK ASSOCIATES, INC.
2910 W. MINNESOTA STREET
INDIANAPOLIS, IN 46241
(317) 248-8871
FOR APPROVAL
9-8-93 C.P.E.*



R-1980-M Note Wide Tread



R-1981-J For Precast Manhole

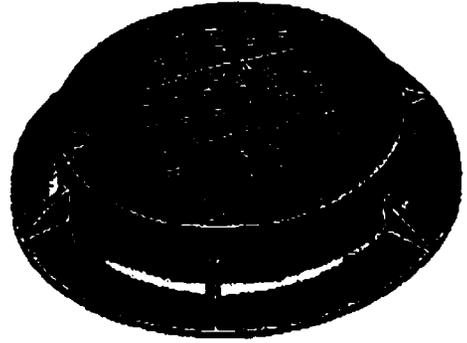
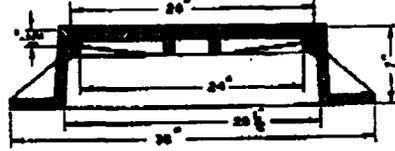
PROJECT RECORD



R-1642 Manhole Frame, Solid Lid

Heavy Duty
Total Weight 390 Pounds

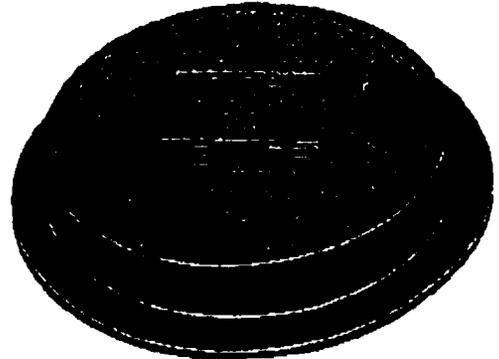
IN STOCK



R-1642 Manhole Frame, Solid Lid

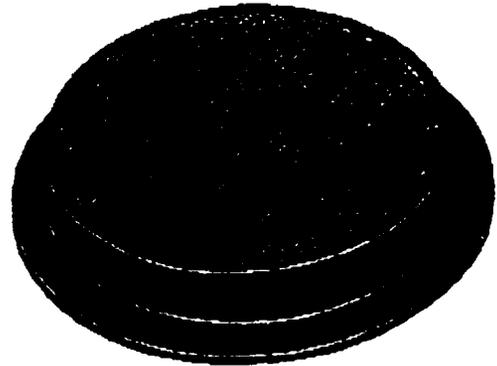
Heavy Duty
Total Weight 325 Pounds

If application requires flange at top for slab-type installation, order as R-1642-15.



R-1642-A Manhole Frame, Solid Lid

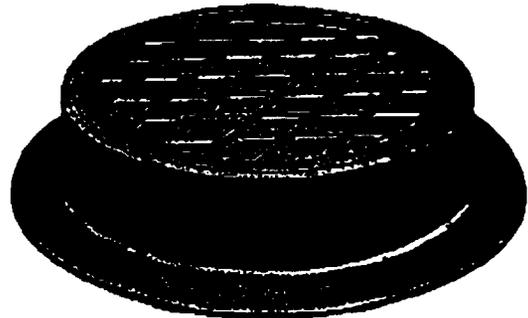
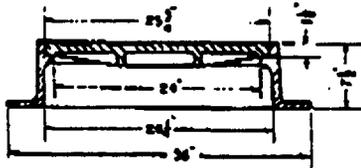
Heavy Duty
Total Weight 325 Pounds



R-1643 Manhole Frame, Solid Lid

Heavy Duty
Total Weight 375 Pounds

*ENVIRO-CHEM SUPERFUND SITE
Zionsville, In.
KENNETH SMOCK ASSOCIATES, INC.
2800 W. MINNESOTA STREET
INDIANAPOLIS, IN 46204
(317) 248-8371
9-8-93 to HMD/MLC*



PROJECT RECORD



PROJECT RECORD

March 1, 1984

Attn: Dick Etchison
KENNETH SMOCK & ASSOCIATES
2910 West Minnesota
Indianapolis, IN 46241

RE: ENVIROCHEM SUPERFUND SITE-AWD TECHNOLOGIES

Dear Dick:

This letter confirms that the concrete mix design submitted and delivered to the above-referenced project complies with the specifications listed on the mix design dated September 20, 1983.

If there are any questions, please do not hesitate to call me at 921-3184.

Sincerely,

READY MIXED CONCRETE CO.

Jim Phillips
Jim Phillips *jd*

JP/jd

1100
BURDICK
PARKWAY
INDIANAPOLIS
INDIANA
46208
(317) 824-8171

EST. 1931

CLIENT: AWD
 CLIENT PROJECT: 2396
 PROJECT NO.: L93139-01

MATERIAL: NICOLON S1000
 16 OZ NONWOVEN GEOTEXTILE
 SAMPLE ID.: S-1

PROJECT RECORD

TEST	ASTM METHOD	UNITS	SPECIMEN NO.										AVE	STD	
			1	2	3	4	5	6	7	8	9	10			
MASS/UNIT AREA	D-3776	oz/sy	18.60	18.86										18.73	0.13
MULLEN BURST	D-3786	psi	790	830	1100	905	950	750	900	900	870	940	893.5	91.7	
GRAB STRENGTH	D-4632	MD-lbs	739.5	589.4	586.9	581.5	565.2	514.1	512.1	673.6	717.0	752.4	623.17	85.65	
		CD-lbs	718.2	732.0	722.0	743.3	711.6	728.7	658.8	709.0	678.9	737.2	713.97	25.16	
GRAB ELONGATION		MD-%	105	90	95	100	100	85	85	90	100	90	94.0	6.6	
		CD-%	90	85	85	80	75	85	80	85	80	105	85.0	7.7	
TRAP TEAR	D-4533	MD-lbs	174.5	191.0	165.8	184.9	207.0	213.1	170.0	167.9	193.8	207.8	187.58	16.84	
		CD-lbs	259.4	234.4	276.2	272.9	254.7	290.7	280.0	224.5	241.6	194.4	252.88	28.02	
PUNCTURE	D-4833	lbs	276.3	284.8	287.1	293.1	335.1	304.3	324.1	244.6	228.2	278.8	288.84	26.35	
			292.6	279.7	305.8	287.5	310.6								
A.O.S.	D-4751	mm	<0.075	<0.075	<0.075	<0.075	<0.075						<0.075		
ABRASION RESIST.	D-3884	lbs-Baseline lbs-Abraded	191	218	230	215	215						213.8	12.67	
			177	210	186	211	204						197.6	13.66	
			RETAINED STRENGTH:										0.92	%	

rsl:TEXTILE.WKZ

CHECKED BY: *RAJ* DATE: 11-5-93 (REV)

CLIENT: AWD
 CLIENT PROJECT: 2396
 PROJECT NO.: L93139-03

MATERIAL: NICOLON S1000
 NONWOVEN GEOTEXTILE
 SAMPLE ID.: S-2

PROJECT RECORD

TEST	ASTM METHOD	UNITS	SPECIMEN NO.										AVE	STD	
			1	2	3	4	5	6	7	8	9	10			
MASS/UNIT AREA	D-3776	oz/sy	11.59	11.30										11.45	0.14
MULLEN BURST	D-3786	psi	570	480	455	470	575	515	560	480	555	520	518.0	42.7	
GRAB STRENGTH	D-4632	MD-lbs	317.2	437.1	470.4	417.5	312.8	315.2	355.5	345.4	432.6	425.2	382.89	56.59	
		CD-lbs	489.5	354.7	449.8	429.9	363.8	333.9	402.1	402.0	348.9	441.9	401.65	48.44	
GRAB ELONGATION		MD-%	105	90	95	100	100	85	85	90	100	90	94.0	6.6	
		CD-%	90	85	85	80	75	85	80	85	80	105	85.0	7.7	
TRAP TEAR	D-4533	MD-lbs	143.6	104.2	102.6	158.5	130.3	152.5	152.6	128.2	152.6	104.4	132.95	21.24	
		CD-lbs	144.7	133.8	159.3	161.7	135.2	154.1	121.9	110.9	130.7	125.8	137.81	15.94	
PUNCTURE	D-4833	lbs	192.1	227.7	223.6	182.0	212.3	191.9	189.1	187.0	169.1	182.2	191.04	17.45	
			179.3	186.7	163.3	181.9	197.4								
A.O.S.	D-4751	mm	0.097	0.089	0.099	0.097	0.098						<0.075		
ABRASION RESIST.	D-3884	lbs-Baseline	134	162	116	120	161						138.6	19.63	
		lbs-Abraded	115	146	128	117	119						125.0	11.40	
RETAINED STRENGTH:												0.90	%		

rsl:139GT2.WKZ

CHECKED BY: *RJA* DATE: 11-6-93

**PEEL AND SHEAR TEST RESULTS
DESTRUCTIVE SEAM TESTING
ASTM D 4437-84 AND NSF 54,1991**



CLIENT: AWD
 CLIENT PROJECT 2396
 PROJECT NO.: L93139-03
 MATERIAL: 60 MIL HDPE
 SAMPLE NO.: UNKNOWN
 SEAM TYPE: D-FUSION

DATE TESTED: 10-26-93
 CHECKED BY: *Sil* DATE: *10-29-93*

PEEL ADHESION

REPLICATE No.	PEAK LOAD (lbs/in)	EPA BREAK CLASSIFICATION CODE	PEEL INCURSION (%)
1	117.6	FTB-SE1	< 10
2	117.4	FTB-SE1	< 10
3	119.3	FTB-SE1	< 10
4	125.9	FTB-SE1	< 10
5	109.8	FTB-SE1	< 10
AVERAGE	118.0		
STD. DEV.	5.14		

PROJECT RECORD

BONDED SEAM (SHEAR) STRENGTH

REPLICATE No.	PEAK LOAD (lbs/in)	EPA BREAK CLASSIFICATION CODE
1	157.4	FTB
2	157.5	FTB
3	158.1	FTB
4	153.6	FTB
5	156.1	FTB
AVERAGE	156.5	
STD. DEV.	1.61	

*orig - J. Jife
 PC - J. Ambrose*

CONFORMANCE TEST RESULTS



CLIENT: AWD
 CLIENT PROJECT: 2396
 PROJECT NO.: L93139-02

MATERIAL: 60 MIL HDPE SMOOTH GEOMEMBRANE

SAMPLE I.D. GM-1

TEST	ASTM METHOD	UNITS	SPECIMEN NO.					AVE	STD
			1	2	3	4	5		
THICKNESS	NSF 54	mils	60.3	63.8	61.9	61.2	65.4	62.85	1.23
			62.5	64.9	63.1	65.4	63.1		
			64.2	62.7	63.2	63.1	63.2		
			63.7	62.6	61.6	62.6	62.5		
			61.2	62.4	62.7	61.5	62.5		
							MIN = 60.3		
DENSITY	D-1505	g/cm ³	0.947	0.946	0.947			0.947	0.00
CARBON BLACK CONTENT	D-1603	%	2.40	2.39				2.40	0.00
CARBON BLACK DISPERSION	D-2663 NSF 54	RATING	A-2	A-1	A-1	A-1	A-1	A-1	
MELT INDEX	D-1238(E)	g/10 min	0.193	0.196	0.195			0.195	0.00
TENSILE PROPERTIES	D-638 TYPE IV								
STRENGTH AT YIELD	M.D.	ppi	161.2	158.0	166.0	153.2	156.8	159.04	4.32
	C.D.	ppi	159.2	156.8	156.4	166.8	158.8	159.60	3.76
STRAIN AT YIELD	M.D.	%	18	17	17	18	18	17.8	0.6
	C.D.	%	17	18	18	18	18	18.0	0.4
STRENGTH AT BREAK	M.D.	ppi	322.0	284.0	277.6	292.4	270.0	289.20	17.98
	C.D.	ppi	287.2	299.2	254.4	268.0	279.2	277.60	15.44
STRAIN AT BREAK	M.D.	%	764	692	676	700	676	701.6	32.6
	C.D.	%	780	796	688	700	772	747.2	44.3

139HDPE

CHECKED BY: SIL DATE: 10-18-95

PROJECT RECORD

"Testing and Inspection Services for the Construction Industry"

REPORT OF TESTS OF 6" X 12" CONCRETE CYLINDERS

Client: AWD Technologies
 Contractor: _____
 Project: Enviro-Chem, Boone County, IN Report No: 3345.29
 Location Of Placement: Decon Pad

Date Made	10/1/93	Cement Brand	Type
Cylinder Group No		Fine Agg. Source	
No. of Cyls. in Set	4	Coarse Agg. Source	
Specified Strength		Type of Mixing	Transit
Time Sampled	7:05 A.M.	Batch Size	6.0 Cu. Yds.
Weather & Temp	53	Batch Weights-SSD or Scale	
Temperature of Concrete	68	Cement	
Concrete Furnished By	IMI	Fine Agg.	
Truck No	341	Coarse Agg.	
Ticket No	1168328	Water	
Field Cure		Admixture	
Slump	3.25"	Air Content	N/A
Type of Mix	5.5 Bag, N/A, Gravel Type II *		
Cyl. Made By	Tim Hagerty		
Information Reported By	Tim Hagerty		

PROJECT RECORD

Field Sample No	3345A	3345B	3345C	3345D
Laboratory No				
Age to be Tested, Days	7	14	28	Hold
Date Received	10/4/93	10/4/93	10/4/93	10/4/93
Date Tested	10/8/93	10/15/93	10/29/93	Hold
Age When Tested, Days	7	14	28	Hold
Condition	Good	Good	Good	Good
Weight, Lbs				
Type of Break	1			
Total Load, Lbs	115500			
Unit Load, PSI	4085			
Specified Strength				

Type of Break: 1-Cone 2-Cone Shear 3-Shear 4-Split

Remarks: * Hi Early

Respectfully submitted,
 Midwest Testing, Inc

BY Jerry Libbey

MT MIDWEST TESTING INC

"Testing and Inspection Services for the Construction Industry"

REPORT OF TESTS OF 6" X 12" CONCRETE CYLINDERS

Client AWI Technologies
 Contractor Kenneth Smock & Associates, Inc.
 Project Enviro-Chem, Boone County, IN Report No 3363.29
 Location Of Placement East and West Sides and Center Slab Section

Date Made	10/14/93	Cement Brand	Type
Cylinder Group No.		Fine Agg Source	
No. of Cyls. in Set	3	Coarse Agg Source	
Specified Strength	3500 P.S.I.	Type of Mixing	Transit
Time Sampled	8:25 A.M.	Batch Size	
Weather & Temp	47	Batch Weights-SSD or Scale	
Temperature of Concrete	60	Cement	
Concrete Furnished By	Ready Mixed Concrete	Fine Agg	
Truck No.	68	Coarse Agg	
Ticket No.	1170066	Water	
Field Cure	1-Day	Admixture	Super Plasticizer
Slump	7.0"	Air Content	1.4%
Type of Mix	5.5 Bag, Gravel, Type III		
Cyl. Made By	Jerry Libby		
Information Reported By	Jerry Libby		

Field Sample No					
Laboratory No.	3363A	3363B	3363C		
Age to be Tested. Days	7	28	28		
Date Received	10/15/93	10/15/93	10/15/93		
Date Tested	10/21/93	11/11/93	11/11/93		
Age When Tested. Days	7	28	28		
Condition	Good	Good	Good		
Weight. Lbs					
Type of Break	1	1	1		
Total Load. Lbs	127000	134500	138000		
Unit Load. PSI	4492	4757	4881		
Specified Strength		3500	3500		

Type of Break: 1-Cone; 2-Cone Shear; 3-Shear; 4-Split

Remarks:

PROJECT RECORD



Respectfully submitted,
 Midwest Testing, Inc

BY Tim Hagerty



"Testing and Inspection Services for the Construction Industry"

REPORT OF TESTS OF 6" X 12" CONCRETE CYLINDERS

Client AWD Technologies
 Contractor _____
 Project Enviro-Chem, Boone County, IN Report No. 3363.29
 Location Of Placement East and West Sides and Center Slab Section

Date Made	10/14/93	Concrete Type	Transit
Cylinder Group No		Form Application	
No. of Cyls. in Set	3	Course App. Source	
Specified Strength	3500	Type of Mix	Transit
Time Sampled	8:25 A.M.	Batch No.	
Weather & Temp	47	Batch Weights SSD or Scale	
Temperature of Concrete	60	Admixture	
Concrete Furnished By	Ready Mixed Concrete	Form App.	
Truck No	68	Course App.	
Ticket No	1170066	Admixture	
Field Cure	1-Day	Admixture	Super Plasticizer
Slump	7.0"	Air Content	1.4%
Type of Mix	5.5 Bag, Gravel, Type III		
Cyl. Made By	Jerry Libby		
Information Reported By	Jerry libby		

Field Sample No	3363A	3363B	3363C		
Laboratory No					
Age to be Tested, Days	7	28	28		
Date Received	10/15/93	10/15/93	10/15/93		
Date Tested	10/21/93	11/11/93	11/11/93		
Age When Tested, Days	7	25	28		
Condition	Good	Good	Good		
Weight, Lbs					
Type of Break	1				
Total Load, Lbs	127000				
Unit Load, PSI	4492				
Specified Strength		3500	3500		

Type of Break. 1-Cone. 2-Cone Shear. 3-Shear. 4-Split

Remarks:

PROJECT RECORD

Respectfully submitted,
 Midwest Testing, Inc.

By: Tim Hagerty



"Testing and Inspection Services for the Construction Industry"

REPORT OF TESTS OF 6" X 12" CONCRETE CYLINDERS

Client: AWI Technologies
 Contractor: _____
 Project: Enviro-Chem, Boone County, IN Report No. 3358.29
 Location Of Placement: Decon Pad

Date Made	10/8/93	Cement Brand	Type
Cylinder Group No		Fine Agg. Source	
No. of Cyls. in Set	3	Coarse Agg. Source	
Specified Strength		Type of Mixing	Transit
Time Sampled	2:10 P.M.	Batch Size	9.0 Cu. Yds.
Weather & Temp	Partly Cloudy 81	Batch Weights-SSD or Scale:	
Temperature of Concrete	78	Cement	
Concrete Furnished By	IMI	Fine Agg.	
Truck No	228	Ticket No.	11169465
Field Cure	5-Day	Coarse Agg.	
Slump	7.5"	Water	
Air Content	1.0%	Admixture	A.E.A.
Type of Mix	5.5 Bag, N/A, Gravel Type III*	Super Plasticizer	
Cyl. Made By	Tim Hagerty		
Information Reported By	Tim Hagerty		

Field Sample No				
Laboratory No	3358A	3358B	3358C	
Age to be Tested, Days	7	14	28	
Date Received	10/13/93	10/13/93	10/13/93	
Date Tested	10/15/93	10/22/93	11/5/93	
Age When Tested, Days	7	14	28	
Condition	Good	Good	Good	
Weight, Lbs.				
Type of Break	2	1		
Total Load, Lbs	79000	136000		
Unit Load, PSI	2794	4810		
Specified Strength				

PROJECT RECORD

Type of Break: 1-Cone; 2-Cone Shear; 3-Shear; 4-Split

Remarks: * High Early Super Plasticizer
 2nd Load #67, Trk. #1169484 S-7" AE 1.5%
 3rd Load #229, Trk. #1169494 S-6" AE 1.0%
 4th Load #68, Trk. #1169502 S-6" AE 2.0%
 5th Load #61, Trk. #4169519 S-7" AE 1.2%

Respectfully submitted,
 Midwest Testing, Inc.

BY Tim Hagerty



"Testing and Inspection Services for the Construction Industry"

REPORT OF TESTS OF 6" X 12" CONCRETE CYLINDERS

Client AWI Technologies
 Contractor _____
 Project Enviro-Chem, Boone County, IN Report No 3358.29
 Location Of Placement Decon Pad

Date Made	10/8/93	Cement Brand	Type
Cylinder Group No.		Fine Agg Source	
No. of Cyls. in Set	3	Coarse Agg Source	
Specified Strength		Type of Mixing	Transit
Time Sampled	2:10 P.M.	Batch Size	9.0 Cu. Yds.
Weather & Temp	Partly Cloudy 81	Batch Weights-SSD or Scale	
Temperature of Concrete	78	Cement	
Concrete Furnished By	IMI	Fine Agg	
Truck No	228	Ticket No	11169465
Field Cure	5-Day	Coarse Agg	
Slump	7.5"	Air Content	1.0%
Type of Mix	5.5 Bag, N/A, Gravel Type III *	Admixture	A.E.A. Super Plasticizer
Cyl. Made By	Tim Hagerty	Water	
Information Reported By	Tim Hagerty		

Field Sample No					
Laboratory No.	3358A	3358B	3358C		
Age to be Tested. Days	7	14	28		
Date Received	10/15/93	10/15/93	10/15/93		
Date Tested	10/15/93	10/22/93	11/5/93		
Age When Tested. Days	7	14	28		
Condition	Good	Good	Good		
Weight. Lbs					
Type of Break	2	1	1		
Total Load. Lbs.	79000	136000	140500		
Unit Load. PSI	2794	4810	4969		
Specified Strength					

Type of Break: 1-Cone; 2-Cone Shear; 3-Shear; 4-Split

Remarks: * High Early Super Plasticizer
 2nd Load #67, Tck. #1169484 S-7" AE 1.5%
 3rd Load #229, Tck. #1169494 S-6" AE 1.0%
 4th Load #68, Tck. #1169502 S-6" AE 2.0%
 5th Load #61, Tck. #4169519 S-7" AE 1.2%

PROJECT RECORD

Respectfully submitted,
 Midwest Testing, Inc.

BY Tim Hagerty

MT MIDWEST TESTING INC.

"Testing and Inspection Services for the Construction Industry"

REPORT OF TESTS OF 6" X 12" CONCRETE CYLINDERS

Client AWD Technologies
 Contractor _____
 Project Enviro-Chem, Boone County, IN Report No. 3360.29
 Location Of Placement Slab Sections: North End Center, Center *

Date Made	10/13/93	Cement Brand	Type
Cylinder Group No		Fine Agg. Source	
No. of Cyls. in Set	3	Coarse Agg. Source	
Specified Strength	3500 P.S.I.	Type of Mixing	Transit
Time Sampled	8:40 A.M.	Batch Size	8.0 Cu. Yds.
Weather & Temp	46	Batch Weights-SSD or Scale	
Temperature of Concrete	61	Cement	
Concrete Furnished By	Ready Mixed Concrete	Fine Agg.	
Truck No	67	Coarse Agg.	
Ticket No.	1169896	Water	
Field Cure	1-Day	Admixture	
Slump	6.0"	Air Content	1.5%
Type of Mix	3500 H.E./NA		
Cyl. Made By	Jerry Libby		
Information Reported By	Jerry Libby		

Field Sample No.					
Laboratory No.	3360A	3360B	3360C		
Age to be Tested, Days	7	14	28		
Date Received	10/14/93	10/14/93	10/14/93		
Date Tested	10/20/93	10/27/93	11/10/93		
Age When Tested, Days	7	14	28		
Condition	Good	Good	Good		
Weight, Lbs.					
Type of Break	1	1	1		
Total Load, Lbs.	130000	138500	143000		
Unit Load, PSI	4598	4898	5058		
Specified Strength					

PROJECT RECORD

Type of Break: 1-Cone: 2-Cone Shear: 3-Shear: 4-Split
 Remarks: * East and West Sections, South End Center

Respectfully submitted,
 Midwest Testing, Inc
 BY Tim Nagerty



MT MIDWEST TESTING INC.

Testing and Inspection Services for the Construction Industry™

REPORT OF TESTS OF 6" X 12" CONCRETE CYLINDERS

Client: AWD Technologies
 Contractor: _____
 Project: Enviro-Chem, Boone County, IN Report No: 3360.29
 Location Of Placement: Slab Sections: North End Center, Center, East and West Sections. *

Date Made	10/13/93	Cement Brand	Type
Cylinder Group No		Fine Agg Source	
No. of Cyls. in Set	3	Coarse Agg Source	
Specified Strength	3500	Type of Mixing	Transit
Time Sampled	8:40 A.M.	Batch Size	8.0 Cu. Yds.
Weather & Temp	46	Batch Weights-SSD or Scale	
Temperature of Concrete	61	Cement	
Concrete Furnished By	Ready Mixed Concrete	Fine Agg	
Truck No.	67	Ticket No.	1169896
Field Cure	1-Day	Coarse Agg	
Slump	6.0"	Water	
Type of Mix	3500 H.E./N.A.	Air Content	1.5%
Cyl. Made By	Jerry Libby	Admixture	
Information Reported By	Jerry libby		

Field Sample No	3360A	3360B	3360C		
Laboratory No					
Age to be Tested, Days	7	14	28		
Date Received	10/14/93	10/14/93	10/14/93		
Date Tested	10/20/93	10/27/93	11/10/93		
Age When Tested, Days	7	14	28		
Condition	Good	Good	Good		
Weight, Lbs					
Type of Break	1				
Total Load, Lbs	130000				
Unit Load, PSI	4598				
Specified Strength					

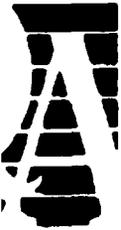
Type of Break: 1-Cone; 2-Cone Shear; 3-Shear; 4-Split

Remarks: * South End Center

PROJECT RECORD

Respectfully submitted,
 Midwest Testing, Inc.

BY Tim Hagerty



**QUALITY
ANALYTICAL
LABS, INC.**

**Project #: 932161
Date : 11/29/93**

**Clean Harbors (Midwest)
Environmental Services Co.
11800 S. Stony Island Ave.
Chicago, IL 60617**

ATTN: Cne' Doran

**Sampling Date: 11/16/93
Analyses Date: 11/22-24/93**

Identification: One sample taken by T. Crippen identified as:

**PROJECT I.D.: EC333031
PROJ./P.O. #IM5123**

Results follow:

Sample ID: U09077

TCLP METALS

Method: SW-846 6010 & 7470

Parameter	PQL (mg/L)	Analysis (mg/L)
Arsenic	0.10	U
Cadmium	0.01	U
Chromium	0.02	U
Lead	0.10	U
Selenium	0.20	U
Silver	0.02	U
Barium	0.01	0.15
Mercury	0.0005	U

PROJECT RECORD

"Precision, Accuracy and Service"

Project #: 932161

Page 2 of 2

Sample ID: U09077 (cont'd)**TCLP VOLATILES**

Method: SW-846 8240 (modified to capillary).

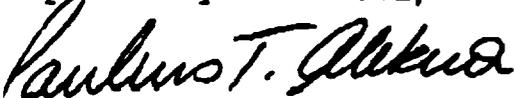
Parameter	PQL (mg/L)	Analysis (mg/L)
Benzene	0.050	U
Carbon tetrachloride	0.050	U
Chlorobenzene	0.050	U
Chloroform	0.050	U
1,2-Dichloroethane	0.050	U
1,1-Dichloroethylene	0.050	U
Methyl ethyl ketone	2.5	U
Tetrachloroethylene	0.050	U
Trichloroethylene	0.050	U
Vinyl chloride	0.050	U

TCLP SEMI-VOLATILES

Method: SW-846 8270

Parameter	PQL (ug/L)	Analysis (ug/L)
pyridine	50.	U
1,4-Dichlorobenzene	50.	U
2-Methylphenol	50.	U
3 & 4-Methylphenol	50.	U
Hexachloroethane	50.	U
Nitrobenzene	50.	U
Hexachlorobutadiene	50.	U
1,4,6-Trichlorophenol	50.	U
1,4,5-Trichlorophenol	50.	U
1,4-Dinitrotoluene	50.	U
Hexachlorobenzene	50.	U
Pentachlorophenol	250.	U

Respectfully submitted,



Paulus (Paul) T. Alekna
 Lab Director
 Quality Analytical Labs, Inc.

Project #: CL932161

PROJECT RECORD

micro air inc.

7132 LAKEVIEW PARKWAY W. DRIVE • INDIANAPOLIS, IN 46268
(317) 293-1533 • 800-486-1533

Indoor Air Quality
Ventilation Design
Asbestos Surveys
Bulk Analysis
Air Monitoring
Industrial Hygiene
Epidemiology
Microbiology
Radon Testing

November 9, 1993

MR. JAMES FIFE
AWD TECHNOLOGIES, INC.
RESIDENCE INN
3553 FOUNDERS ROAD
INDIANAPOLIS, IN 46268

RE: ENVIRO-CHEM SITE
Asbestos Bulk Sample Results
PO Number: 2396

Dear Mr. Fife:

Enclosed are the results of the analysis performed on the bulk samples brought to Micro Air, Inc. If you have any questions concerning this report, please do not hesitate to contact us.

Received From: AWD TECH
Date Received: 11/05/93

<u>SAMPLE ID</u>	<u>LAB ID</u>	<u>ASBESTOS</u>	<u>COLOR/HOMOGENEOUS</u>	<u>SAMPLE COMPOSITION</u>	
#1	57021	(+)	GRAY/BLK/BROWN/NO	CHRYSOTILE ASBESTOS	50%
				FIBROUS GLASS	20%
BOILER SEAL				BINDER	30%

Method of Analysis: Polarized Light Microscopy with Dispersion Staining, EPA 600/M4-82-020. This report should not be used to imply product or service endorsement by NVLAP or any agency of the U.S. Government. This report relates only to items tested.

Date of Analysis: November 9, 1993

Analyst: Deanna L. Hufnagel, Laboratory Technician

Reviewed By: *Ann S. Gaither*

Ann S. Gaither
Laboratory Manager

PROJECT RECORD

micro air inc.

7132 LAKEVIEW PARKWAY W. DRIVE • INDIANAPOLIS, IN 46268
(317) 293-1533 • 800-486-1533

Indoor Air Quality
Ventilation Design
Asbestos Surveys
Bulk Analysis
Air Monitoring
Industrial Hygiene
Epidemiology
Microbiology
Radon Testing

Mr. Jim Fife
AWD Technologies, Inc.
Penn Center West
Building 111, Suite 300
Pittsburgh, PA 15276

November 5, 1993

RE: Asbestos Sampling, Enviro-Chem Site
Micro Air Job # 20-2298-D

Dear Mr. Fife:

On November 3rd, Micro Air, Inc. performed bulk sampling of demolition debris from an A-frame structure located on the property of the Enviro-Chem Site.

The old A-frame structure has been demolished and the pile of debris consisted of dirt, wood, metal, insulation, and general construction debris. Bulk samples were collected from building materials that were suspected to contain asbestos. The following materials were sampled from the debris: (1) Roof Shingles, (2) Ceiling Tile, (3) Tan/Pink Insulation, (4) White Insulation, (5) Gypsum Wallboard, (6) Olive Floor Tile, (7) White Floor Tile.

Samples from tank insulation were collected by Mr. Scott Weishaar from a restricted work area. The samples collected by Mr. Weishaar were non-suspect foam materials and therefore they were not analyzed for asbestos.

Only the floor tile tested positive for asbestos content. Resilient floor coverings are considered Category I, non-friable asbestos-containing materials. They are not regulated materials unless they are likely to become friable during the course of renovation or demolition. Since the structure has already been demolished and the tile has not become friable and is not likely to become friable during any other demolition activities, the material can be disposed of as regular solid waste.

Thank you for the opportunity to provide our asbestos related services. If you have any questions concerning this report, please do not hesitate to contact me.

Sincerely,


Tim French
Building Inspector

Certificate #: 192008032
Expiration Date: 5/18/93

PROJECT RECORD

micro air inc.

7132 LAKEVIEW PARKWAY W. DRIVE • INDIANAPOLIS, IN 46268
(317) 293-1533 • 800-486-1533

Indoor Air Quality
Ventilation Design
Asbestos Surveys
Bulk Analysis
Air Monitoring
Industrial Hygiene
Epidemiology
Microbiology
Radon Testing

November 8, 1993

MR. JAMES R. FIFE
AWD TECHNOLOGIES, INC.
PENN CENTER WEST
BUILDING III SUITE 300
PITTSBURGH, PA 15276

RE: ENVIRO-CHEM SITE
Asbestos Bulk Sample Results - Job Number 2298

Dear Mr. Fife:

Enclosed are the results of the analysis performed on the bulk samples taken by Micro Air, Inc. at the site referenced above. If you have any questions concerning this report, please do not hesitate to contact us.

Received From: AWD TECHNOLOGIES
Date Received: 11/04/93

<u>SAMPLE ID</u>	<u>LAB ID</u>	<u>ASBESTOS</u>	<u>COLOR/HOMOGENEOUS</u>	<u>SAMPLE COMPOSITION</u>	
1 ROOF SHINGLE DEMOLISHED A-FRAME STRUCTURE	56949	(-)	GRAY/BLACK/NO	CELLULOSE BINDER	40% 60%
2 GYPSUM WALLBOARD DEMOLISHED A-FRAME STRUCTURE	56950	(-)	WHITE/YES	CELLULOSE BINDER	15% 85%
3 TAN/PINK INSULATION DEMOLISHED A-FRAME STRUCTURE	56951	(-)	TAN/PINK/YES	CELLULOSE FIBROUS GLASS BINDER	<1% 95% 5%
4 CEILING TILE DEMOLISHED A-FRAME STRUCTURE	56952	(-)	TAN/WHITE/NO	CELLULOSE FIBROUS GLASS BINDER	80% 10% 10%

PROJECT RECORD

Mr. James R. Fife
November 8, 1993
PAGE 2

ASBESTOS BULK SAMPLE RESULTS FOR
ENVIRO-CHEM SITE

<u>SAMPLE ID</u>	<u>LAB ID</u>	<u>ASBESTOS</u>	<u>COLOR/HOMOGENEOUS</u>	<u>SAMPLE COMPOSITION</u>	
5 FLOOR TILE, OLIVE DEMOLISHED A-FRAME STRUCTURE	56953	(+)	LT.GREEN/YES	CHRYOTILE ASBESTOS BINDER	8% 92%
6 FLOOR TILE, WHITE DEMOLISHED A-FRAME STRUCTURE	56954	(+)	WHITE/YES	CHRYOTILE ASBESTOS BINDER	10% 90%
7 WHITE INSULATION DEMOLISHED A-FRAME STRUCTURE	56955	(-)	WHITE/YES	FIBROUS GLASS SYNTHETICS/HAIR BINDER	2% 88% 10%

Method of Analysis: Polarized Light Microscopy with Dispersion Staining, EPA 600/M4-82-020. This report should not be used to imply product or service endorsement by NVLAP or any agency of the U.S. Government. This report relates only to items tested.

Date of Analysis: November 5, 1993

Analyst: Ann S. Gaither, Laboratory Manager

Reviewed By:



Ann S. Gaither
Laboratory Manager

PROJECT RECORD



TO ENSURE PROPER HANDLING OF SAMPLES PLEASE COMPLETE THIS ENTIRE FORM

HERITAGE LABORATORIES, INC.

I - No 14515

7901 West Morris Street

Indianapolis, Indiana 46231 (317) 243-0811 Fax (317) 486-5095

Co. Name: AWD TECHNOLOGIES					ANALYSES REQUESTED (Note special detection limits or methods)					Report To:						
Project Name: ENVIRO-CHEM										Co: AWD TECH AWD TECH Add: RESIDENCE INN 3553 FOUNDERS RD INDPLS IN 46268 Attn: JIM FIFE Phone: 872-0462 Accelerated Turnaround Requested _____ (Subject to Additional Charge) Result Request by: _____ / ____ / ____ Mo Day Yr (Date must be Accepted and Approved by Lab)						
Quote No.:		PO No.: 2396			PROJECT RECORD					ASBESTOS						
ENVIRONMENTAL PROGRAM:																
CWA NPDES _____ IWP _____ SLUDGE _____																
RCRA MW _____ SW _____ DISPOSAL _____																
SDWA _____ CERCLA/SUPERFUND _____ OTHER _____																
Sampled by: SCOTT WEISHAAR																
Sample ID:	Date:	Time:	Comp	Grab	Sample Description:	Sample Type (Matrix): DW, GW, WW, Soil, Oil, Sludge, Other	No. of Containers						Remarks:	EMS Sample No.		
#1	9/14/93	10:15a		X	ECC-04A1-PBM-05	Boiler	1									
#2	9/14/93	11:15		X	ECC-04A1-PBM-06	Insulation	1									
Relinquished by (Signature): <i>Scott Weishaar</i>							Date / Time: 9/14/93 11:40 AM	Received by (Signature): <i>James R. Fife</i>			Relinquished by (Signature):		Date / Time: /	Received by (Signature):		
Relinquished by (Signature):							Date / Time: /	Received by (Signature):			Relinquished by (Signature):		Date / Time: /	Received by (Signature):		
Relinquished by (Signature): <i>James R. Fife</i>							Date / Time: 9/14/93 5:30 PM	Received for Lab by (Signature): <i>S. P. Stee-</i>			Date / Time: 9/14/93 5:30 PM	Remarks:				

Distribution: White original to be retained by client. Yellow copy to accompany sample to laboratory. Pink copy to also be retained by client

C E R T I F I C A T E O F A N A L Y S I S

Service Location HERITAGE LABORATORIES, INC. 301 W. MORRIS ST. INDIANAPOLIS, IN 46231 (317)243-8305	Received 14-SEP-93	Project 2471	Lab ID A289924
	Complete 22-SEP-93	PO Number 92005 *	
	Printed 22-SEP-93	Sampled 14-SEP-93 10:15	

Report To JIM FIFE AWD TECHNOLOGIES, INC. 3553 FOUNDERS RD C/O RESIDENCE INN INDIANAPOLIS, IN 46268	Bill To ACCOUNTS PAYABLE AWD TECHNOLOGIES, INC. BUILDING 3, SUITE 300 PENN CENTER WEST PITTSBURGH, PA 15276
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Sample Description SAMPLE ID: ONE DESCRIPTION: ECC-04A1-PBM-05

ASBESTOS (POLARIZED LIGHT MICROSCOPY) NVLAP 18-A01			
Analysis Date: 20-SEP-93	Vendor: MICRO AIR, INC.	Test: G616.0.0	
Parameter	Result	Det. Limit	Units
ASBESTOS CELLULOSE 3% FIBROUS GLASS 75% RTNDER 22%	NEG		

Sample Comments NEG Negative Sample chain of custody number 14515. This Certificate shall not be reproduced, except in full, without the written approval of the lab. As indicated, some testing was performed at the following locations: MICRO AIR, INC. 7132 LAKEVIEW PKWY W. DR., INDIANAPOLIS, IN 46268
--

PROJECT RECORD



Quality Assurance Officer: _____

C E R T I F I C A T E O F A N A L Y S I S

Service Location HERITAGE LABORATORIES, INC. 901 W. MORRIS ST. INDIANAPOLIS, IN 46231 (317)243-8305	Received	Project	Lab ID
	14-SEP-93	2471	A289925
	Complete	PO Number	
	22-SEP-93	92005 *	
	Printed	Sampled	
	22-SEP-93	14-SEP-93 10:15	

Report To	Bill To
JIM FIFE AWD TECHNOLOGIES, INC. 3553 FOUNDERS RD C/O RESIDENCE INN INDIANAPOLIS, IN 46268	ACCOUNTS PAYABLE AWD TECHNOLOGIES, INC. BUILDING 3, SUITE 300 PENN CENTER WEST PITTSBURGH, PA 15276

Sample Description
SAMPLE ID: TWO DESCRIPTION: ECC-04A1-PBM-06 <i>Boiler Burner</i>

ASBESTOS (POLARIZED LIGHT MICROSCOPY) NVLAP 18-A01			
Analysis Date: 20-SEP-93	Vendor: MICRO AIR, INC.	Test: G616.0.0	
Parameter	Result	Det. Limit	Units
ASBESTOS	NEG		
CELLULOSE <1% FIBROUS GLASS 70% RTNDR 30%			

Sample Comments
NEG Negative Sample chain of custody number 14515. This Certificate shall not be reproduced, except in full, without the written approval of the lab. As indicated, some testing was performed at the following locations: MICRO AIR, INC. 7132 LAKEVIEW PKWY W. DR., INDIANAPOLIS, IN 46268

PROJECT RECORD



Quality Assurance Officer: _____



TO ENSURE PROPER HANDLING OF SAMPLES PLEASE COMPLETE THIS ENTIRE FORM

HERITAGE LABORATORIES, INC.

I - No 14513

7901 West Morris Street

Indianapolis, Indiana 46231 (317) 243-0811 Fax (317) 486-5095

Co. Name: AWD TECHNOLOGIES					PROJECT RECORD										Report To:									
Project Name: ENVIRO - CHEM															Analyses Requested (Note special detection limits or methods)					CO: JIM FIFE AWD TECHNOLOGIES				
Quote No.: Z117222		PO No.: 2396													METHOD RCRA TCLP - CLP SW 01.01.0 METHOD CHROMIUM - SW-846 7195 METHOD TIN - SW-846 6010 MANGANESE ARSENIC					Add: RESIDENCE INN				
ENVIRONMENTAL PROGRAM:																				3553 FOUNDERS RD AWD				
CWA NPDES IWP SLUDGE					INDPLS IN 46268					Attn: JIM FIFE														
RCRA MW SW DISPOSAL					TIN - SW-846 6010					Phone: 317-872-0462														
SDWA CERCLA/SUPERFUND OTHER					Accelerated Turnaround Requested YES (Subject to Additional Charge)					Result Request by: 09 / 07 / 93 Mo Day Yr (Date must be Accepted and Approved by Lab)														
Sampled by: SCOTT WEISHAAR					Sample Type (Matrix): DW, GW, WW, Soil, Oil, Sludge, Other					Remarks:					EMS Sample No.									
Sample ID:	Date:	Time:	Comp	Grab	Sample Description:	No. of Containers																		
# 1	08/31/93	1:00	✓		ECC-04A1-PBM-01 CONCRETE →	1																		
# 2	08/31/93	1:40	✓		ECC-04A1-PBM-02 FIBERGLASS →	1																		
# 3	08/31/93	2:00	✓		ECC-04A1-PBM-03 STYROFOAM →	1																		
# 4	08/31/93	2:15	✓		ECC-04A1-PBM-04 WOOD →	1																		
Relinquished by: (Signature) <i>Scott Weishaar</i>					Date / Time: 08/31/93 4:30pm					Received by: (Signature) <i>JR Fife</i>					Date / Time: /	Received by: (Signature)								
Relinquished by: (Signature) <i>JR Fife</i>					Date / Time: 8/31/93 5:45					Received by: (Signature)					Date / Time: /	Received by: (Signature)								
Relinquished by: (Signature)					Date / Time: 1					Received by Lab by: (Signature) <i>Steve Asker</i>					Date / Time: 8/31/93 5:45	Remarks								
Distribution: White original to be retained by client. Yellow copy to accompany sample to laboratory. Pink copy to also be retained by client.																								



TO ENSURE PROPER HANDLING OF SAMPLES PLEASE COMPLETE THIS ENTIRE FORM

HERITAGE LABORATORIES, INC.

I - No 14514

7901 West Morris Street

Indianapolis, Indiana 46231 (317) 243-0811 Fax (317) 486-5095

Co. Name: <u>AWD TECHNOLOGIES</u>					PROJECT RECORD										Report To:									
Project Name: <u>ENVIRO - CHEM</u>															Analyses Requested (Note special detection limits or methods)					Co: <u>AWD TECHNOLOGIES</u>				
Quote No.: <u>Z117222</u>		PO No.: <u>2396</u>													RCRA METHOD CLP SOL OL M01.0 CHROMIUM VI SW-846 METHOD 7195 TIN SW-846 METHOD 6010					Add: <u>RESIDENCE INN</u>				
ENVIRONMENTAL PROGRAM:																				Attn: <u>JAMES FIFE</u>				
CWA NPDES IWP SLUDGE					RCRA MW SW DISPOSAL					Phone: <u>317-872-0462</u>														
SDWA CERCLA/SUPERFUND OTHER					Accelerated Turnaround Requested <u>Yes</u> (Subject to Additional Charge)					Result Request by: <u>09/14/93</u> Mo Day Yr (Date must be Accepted and Approved by Lab)														
Sampled by: <u>SCOTT WEISHAAR</u>					Sample Type (Matrix): DW, GW, WW, Soil, Oil, Sludge, Other					Remarks:					EMS Sample No.									
Sample ID:	Date:	Time:	Comp	Grab	Sample Description:	No. of Containers	RCRA TCLP	CHROMIUM VI	TIN															
<u>02</u>	<u>9/7/93</u>	<u>10:15</u>	<input checked="" type="checkbox"/>		<u>ECC-04A1-PAM-02</u> <u>FIBERGLASS</u>	<u>15</u>	<u>15</u>	<u>15</u>	<u>15</u>															
<u>03</u>	<u>9/7/93</u>	<u>10:30</u>	<input checked="" type="checkbox"/>		<u>ECC-04A1-PAM-03</u> <u>STYROFOAM</u>	<u>15</u>	<u>15</u>	<u>15</u>	<u>15</u>															
<u>04</u>	<u>9/7/93</u>	<u>11:00</u>	<input checked="" type="checkbox"/>		<u>ECC-04A1-PAM-04</u> <u>WOOD</u>	<u>1</u>	<u>1</u>	<u>1</u>	<u>1</u>															
Relinquished by (Signature): <u>Scott Weishaar</u>					Date/Time: <u>9/7/93 12:15pm</u>		Received by (Signature): <u>James R. Fife</u>					Relinquished by (Signature):					Date/Time: <u>/</u>	Received by (Signature):						
Relinquished by (Signature): <u>James R. Fife</u>					Date/Time: <u>9/7/93 11:04P</u>		Received by (Signature): <u>Hayden Scott</u>					Relinquished by (Signature):					Date/Time: <u>/</u>	Received by (Signature):						
Relinquished by (Signature):					Date/Time: <u>/</u>		Received for Lab by (Signature):					Date/Time: <u>/</u>		Remarks:										
Distribution: White original to be retained by client Yellow copy to accompany sample to laboratory Pink copy to also be retained by client																								



Memorandum

PGH-93-EJV-1072

TO: Mark Dowiak
DATE: September 21, 1993

FROM: Evan Verbanic *EV*
COPIES: J. Fife
H. Roffman
File

SUBJECT: Data Validation - ECC - Zionsville
Sample Numbers ECC-04A1 - PBM-01 through 04
AWD Project Number 2396-001
(Field Construction Support)

The above referenced analytical data, prepared in accordance with SW-846 Test Method 1311: Toxicity Characteristic Leaching Procedure, were reviewed for accuracy and thoroughness with regard to the following:

- Specified detection limits were reviewed to ensure that all were below set regulatory limits.
- The selection of extracting solutions were reviewed to ensure that appropriate extraction fluids were used.
- Surrogate recovery results were reviewed to identify percent recoveries below acceptable levels.
- Results of laboratory blank were reviewed. Since no contamination was detected, no action was taken.
- Quality assurance procedures were reviewed for appropriateness and completeness, specifically with respect to relative percent differences of laboratory duplicate samples.

On the basis of this review, all reported data were found acceptable for their intended use.

In addition, detected sample concentrations were checked against the TCLP Maximum Allowable Limits for those compounds for which limits exist. All positive detected values were found to be below the RCRA Maximum Allowable Limits.

EJV/slk

PROJECT RECORD

C E R T I F I C A T E O F A N A L Y S I S

Service Location HERITAGE LABORATORIES, INC. 301 W. MORRIS ST. INDIANAPOLIS, IN 46231 (317)243-8305	Received 31-AUG-93	Project 2471	Lab ID A288829
	Complete 17-SEP-93	PO Number 92005 *	
	Printed 12-OCT-93	Sampled 31-AUG-93 13:00	

Report To JIM FIFE AWD TECHNOLOGIES, INC. 3553 FOUNDERS RD C/O RESIDENCE INN INDIANAPOLIS, IN 46268	Bill To ACCOUNTS PAYABLE AWD TECHNOLOGIES, INC. BUILDING 3, SUITE 300 PENN CENTER WEST PITTSBURGH, PA 15276
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SAMPLE I.D.: ECC-04A1-PBM-01 DESCRIPTION: CONCRETE LOCATION: ECC -ZIONSVILLE	Sample Description <h1 align="center">PROJECT RECORD</h1>
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ZERO HEADSPACE EXTRACTION (TCLP) SW846-1311			
Analyst: G. WILSON		Analysis Date: 03-SEP-93	
Test: P108.1.0			
Parameter	Result	Det. Limit	Units
TOTAL SAMPLE WEIGHT	25.0		Grams
LIQUID FRACTION (GRAMS)	NA		Grams
LIQUID PORTION	NA		mL
EXTRACTED SAMPLE	25.0		Grams
PHASE ONE VOLUME (REP 0)	227.5		mL
PHASE TWO VOLUME (REP 1)	NA		mL

CLP VOLATILE ORGANICS OLMO1			
Analyst: G. WILSON		Analysis Date: 07-SEP-93 08:32	
		Instrument: GC/MS VOA	
Test: 0902.2.0			
Prep: ZERO HEADSPACE EXTRACTION (TCLP) SW846-1311 P108.1.0			
Parameter	Result	Det. Limit	Units
CHLOROMETHANE	BDL	100	ug/L
BROMOMETHANE	BDL	100	ug/L
VINYL CHLORIDE	BDL	100	ug/L
CHLOROETHANE	BDL	100	ug/L
METHYLENE CHLORIDE	BDL	100	ug/L
ACETONE	BDL	100	ug/L
CARBON DISULFIDE	BDL	100	ug/L
1,1-DICHLOROETHENE	BDL	100	ug/L
1,1-DICHLOROETHANE	BDL	100	ug/L
1,2-DICHLOROETHENE (TOTAL)	BDL	100	ug/L
CHLOROFORM	BDL	100	ug/L
1,2-DICHLOROETHANE	BDL	100	ug/L
2-BUTANONE	BDL	100	ug/L
1,1,1-TRICHLOROETHANE	BDL	100	ug/L
CARBON TETRACHLORIDE	BDL	100	ug/L
BROMODICHLOROMETHANE	BDL	100	ug/L
1,2-DICHLOROPROPANE	BDL	100	ug/L
CIS-1,3-DICHLOROPROPENE	BDL	100	ug/L
CHLOROETHENE	BDL	100	ug/L
BROMOCHLOROMETHANE	BDL	100	ug/L
1,1,2-TRICHLOROETHANE	BDL	100	ug/L
BENZENE	BDL	100	ug/L

Parameter	Result	Det. Limit	Units
TRANS-1,3-DICHLOROPROPENE	BDL	100	ug/L
MOFORM	BDL	100	ug/L
METHYL-2-PENTANONE	BDL	100	ug/L
2-HEXANONE	BDL	100	ug/L
TETRACHLOROETHENE	BDL	100	ug/L
TOLUENE	BDL	100	ug/L
1,1,2,2-TETRACHLOROETHANE	BDL	100	ug/L
CHLOROBENZENE	BDL	100	ug/L
ETHYLBENZENE	BDL	100	ug/L
STYRENE	BDL	100	ug/L
XYLENE (TOTAL)	BDL	100	ug/L
SURROGATE RECOVERY			

DICHLOROETHANE-D4	97		% Rec
TOLUENE-D8	88		% Rec
BROMOFLUOROBENZENE	92		% Rec
1:10 DILUTION.			

TOX CHAR LEACHING PROCEDURE (TCLP W/ ORGANICS) SW846-1311			
Analyst: B. NAHM		Analysis Date: 02-SEP-93	
		Test: P107.1.0	
Parameter	Result	Det. Limit	Units
TOTAL SAMPLE WEIGHT	100		Grams
LIQUID FRACTION (GRAMS)	NA		Grams
EXTRACTED SAMPLE	100		Grams
SOLIDS	100		Percent
MM SIEVE TEST			Passed
INITIAL PH	10.21		Std. Units
ADJUSTED PH	1.96		Std. Units
BUFFER SOLUTION PH	4.92		Std. Units
FINAL PH	6.92		Std. Units
VOLUME BUFFERED SOLUTION	2000		mL
VOLUME EXTRACT FILTERED	2000		mL
LIQUID FRACTION	NA		mL
TOTAL VOLUME FILTRATE	2000		mL
AMBIENT TEMPERATURE	23		Degrees C
INITIAL TIME	8034.4		HRS
FINAL TIME	8050.9		HRS
PHASE 0 VOLUME (REP 0)	NA		mL
PHASE 0 WEIGHT	NA		Grams
PHASE 0 DENSITY	NA		g/mL
PHASE 1 VOLUME (REP 1)	NA		mL
PHASE 1 WEIGHT	NA		Grams
PHASE 1 DENSITY	NA		g/mL

CLP SEMI-VOLATILE EXTRACTION OLMO1			
Analyst: C. KING		Analysis Date: 09-SEP-93	
Prep: TOX CHAR LEACHING PROCEDURE (TCLP W/ ORGANICS) SW846-1311		Test: P901.2.0	
Parameter	Result	Det. Limit	Units
INITIAL WEIGHT OR VOLUME	1000		mL
FINAL VOLUME	1.0		mL

PROJECT RECORD

CLP SEMI-VOLATILE ORGANICS OLM01

Analyst: A. BRADBURN

Analysis Date: 14-SEP-93 19:05 Instrument: GC/MS SVOA

Test: 0901.2.0

ep: CLP SEMI-VOLATILE EXTRACTION OLM01 P901.2.0

ep: TOX CHAR LEACHING PROCEDURE (TCLP W/ ORGANICS) SW846-1311 P107.1.0

Parameter	Result	Det. Limit	Units
PHENOL	EST 5	10	ug/L
BIS(2-CHLOROETHYL)ETHER	BDL	10	ug/L
2-CHLOROPHENOL	BDL	10	ug/L
1,3-DICHLOROBENZENE	BDL	10	ug/L
1,4-DICHLOROBENZENE	BDL	10	ug/L
1,2-DICHLOROBENZENE	BDL	10	ug/L
2-METHYLPHENOL	BDL	10	ug/L
BIS(2-CHLOROISOPROPYL)ETHER	BDL	10	ug/L
4-METHYLPHENOL	BDL	10	ug/L
N-NITROSO-DI-N-PROPYLAMINE	BDL	10	ug/L
HEXACHLOROETHANE	BDL	10	ug/L
NITROBENZENE	BDL	10	ug/L
ISOPHORONE	16	10	ug/L
2-NITROPHENOL	BDL	10	ug/L
2,4-DIMETHYLPHENOL	BDL	10	ug/L
BIS(2-CHLOROETHOXY)METHANE	BDL	10	ug/L
2,4-DICHLOROPHENOL	BDL	10	ug/L
1,2,4-TRICHLOROBENZENE	BDL	10	ug/L
NAPHTHALENE	BDL	10	ug/L
4-CHLOROANILINE	BDL	10	ug/L
HEXACHLOROBUTADIENE	BDL	10	ug/L
4-CHLORO-3-METHYLPHENOL	BDL	10	ug/L
1-METHYLNAPHTHALENE	BDL	10	ug/L
1,2,3,4-TETRACHLOROCYCLOPENTADIENE	BDL	10	ug/L
2,4,6-TRICHLOROPHENOL	BDL	10	ug/L
2,4,5-TRICHLOROPHENOL	BDL	25	ug/L
2-CHLORONAPHTHALENE	BDL	10	ug/L
2-NITROANILINE	BDL	25	ug/L
DIMETHYLPHTHALATE	BDL	10	ug/L
ACENAPHTHYLENE	BDL	10	ug/L
2,6-DINITROTOLUENE	BDL	10	ug/L
3-NITROANILINE	BDL	25	ug/L
ACENAPHTHENE	BDL	10	ug/L
2,4-DINITROPHENOL	BDL	25	ug/L
4-NITROPHENOL	BDL	25	ug/L
DIBENZOFURAN	BDL	10	ug/L
2,4-DINITROTOLUENE	BDL	10	ug/L
DIETHYLPHTHALATE	BDL	10	ug/L
4-CHLOROPHENYLPHENYLEETHER	BDL	10	ug/L
FLUORENE	BDL	10	ug/L
4-NITROANILINE	BDL	25	ug/L
4,6-DINITRO-2-METHYLPHENOL	BDL	25	ug/L
N-NITROSO-DIPHENYLAMINE	BDL	10	ug/L
4-BROMOPHENYLPHENYLEETHER	BDL	10	ug/L
HEXACHLOROBENZENE	BDL	10	ug/L
PENTACHLOROPHENOL	BDL	25	ug/L
PHENANTHRENE	BDL	10	ug/L
ANTHRACENE	BDL	10	ug/L
INDAZOLE	BDL	10	ug/L
4-N-BUTYLPHTHALATE	BDL	10	ug/L
FLOURANTHENE	BDL	10	ug/L
PYRENE	BDL	10	ug/L
BENZYL BUTYL PHTHALATE	BDL	10	ug/L

PROJECT RECORD

Parameter	Result	Det. Limit	Units
3,3'-DICHLOROBENZIDINE	BDL	10	ug/L
1,2,3,4-TETRAHYDROPHENANTHRENE	BDL	10	ug/L
FLUORENE	BDL	10	ug/L
BIS(2-ETHYLHEXYL) PHTHALATE	BDL	10	ug/L
DI-N-OCTYL PHTHALATE	BDL	10	ug/L
BENZO(B) FLUORANTHENE	BDL	10	ug/L
BENZO(K) FLUORANTHENE	BDL	10	ug/L
BENZO(A) PYRENE	BDL	10	ug/L
INDENO(1,2,3-CD) PYRENE	BDL	10	ug/L
DIBENZ(A,H) ANTHRACENE	BDL	10	ug/L
BENZO(G,H,I) PERYLENE	BDL	10	ug/L
PYRIDINE	BDL	50	ug/L
3-METHYLPHENOL (M-CRESOL)	BDL	10	ug/L
SURROGATE RECOVERY			

2-FLUOROPHENOL	74		% Rec
PHENOL-D5	80		% Rec
NITROBENZENE-D5	83		% Rec
2-CHLOROPHENOL-D4	87		% Rec
2-FLUOROBIPHENYL	87		% Rec
2,4,6-TRIBROMOPHENOL	92		% Rec
TERPHENYL-D14	86		% Rec
1,2-DICHLOROBENZENE-D4	70		% Rec

ALSO DETECTED			

UNKNOWN	EST 14 RT=6.69		ug/L
METHYLETHYL ESTER PROPANOIC ACID	EST 20 RT=6.77		ug/L
UNKNOWN ACID	EST 11 RT=7.2		ug/L
UNKNOWN	EST 5 RT=7.53		ug/L
2-METHYL-1-METHYLETHYL ESTER PROPANOIC ACID	EST 10 RT=7.59		ug/L
UNKNOWN	EST 21 RT=7.68		ug/L
UNKNOWN	EST 6 RT=7.84		ug/L
UNKNOWN ACID	EST 52 RT=8.54		ug/L
UNKNOWN	EST 7 RT=9.53		ug/L
UNKNOWN	EST 29 RT=9.94		ug/L
UNKNOWN	EST 10 RT=11.24		ug/L
UNKNOWN ACID	EST 19 RT=11.47		ug/L
UNKNOWN	EST 6 RT=14.04		ug/L
2-(2-BUTOXYETHOXY)ETHANOL	EST 53 RT=14.74		ug/L
NONANOIC ACID	EST 15 RT=15.74		ug/L
UNKNOWN	EST 6 RT=19.3		ug/L
UNKNOWN	EST 5 RT=19.4		ug/L
UNKNOWN	EST 5 RT=19.97		ug/L
HEXANEDIOIC ACID, DIOCTYL ESTER	EST 4 RT=26.95		ug/L
BENZOIC ACID	EST 12 RT=14.4		ug/L

FAA OR ICP ACID DIGESTION OF AQUEOUS SAMPLES (CLP) ILM01

Analyst: S. CARDWELL

Analysis Date: 04-SEP-93

Test: P930.4.0

Prep: TOX CHAR LEACHING PROCEDURE (TCLP W/ ORGANICS) SM846-1311 P107.1.0

Parameter	Result	Det. Limit	Units
INITIAL WEIGHT OR VOLUME	50		mL
FINAL WEIGHT OR VOLUME	50		mL

PROJECT RECORD

FAA OR ICP ACID DIGESTION OF AQUEOUS SAMPLES (CLP) ILM01			
Analyst: E. MERRILL		Analysis Date: 09-SEP-93	
Prep: TOX CHAR LEACHING PROCEDURE (TCLP W/ ORGANICS) SW846-1311 P107.1.0		Test: P930.4.1	
Parameter	Result	Det. Limit	Units
INITIAL WEIGHT OR VOLUME	50		mL
FINAL WEIGHT OR VOLUME	50		mL

GFAA ACID DIGESTION OF AQUEOUS SAMPLES (CLP) ILM01			
Analyst: S. CARDWELL		Analysis Date: 04-SEP-93	
Prep: TOX CHAR LEACHING PROCEDURE (TCLP W/ ORGANICS) SW846-1311 P107.1.0		Test: P930.6.0	
Parameter	Result	Det. Limit	Units
INITIAL WEIGHT OR VOLUME	50		mL
FINAL WEIGHT OR VOLUME	50		mL

GFAA ACID DIGESTION OF AQUEOUS SAMPLES (CLP) ILM01			
Analyst: C. COFFEY		Analysis Date: 09-SEP-93	
Prep: TOX CHAR LEACHING PROCEDURE (TCLP W/ ORGANICS) SW846-1311 P107.1.0		Test: P930.6.1	
Parameter	Result	Det. Limit	Units
INITIAL WEIGHT OR VOLUME	50		mL
FINAL WEIGHT OR VOLUME	50		mL

MERCURY CVAA ACID DIGESTION OF AQUEOUS SAMPLES (CLP) ILM01			
Analyst: R. BYERS		Analysis Date: 09-SEP-93	
Prep: TOX CHAR LEACHING PROCEDURE (TCLP W/ ORGANICS) SW846-1311 P107.1.0		Test: P931.6.0	
Parameter	Result	Det. Limit	Units
INITIAL WEIGHT OR VOLUME	100		mL
FINAL VOLUME	100		mL

ANTIMONY ICP (CLP) ILM01			
Analyst: M. JAO		Analysis Date: 07-SEP-93 08:00 Instrument: ICP	
Prep: FAA OR ICP ACID DIGESTION OF AQUEOUS SAMPLES (CLP) ILM01 P930.4.0		Test: M902.3.0	
Prep: TOX CHAR LEACHING PROCEDURE (TCLP W/ ORGANICS) SW846-1311 P107.1.0			
Parameter	Result	Det. Limit	Units
ANTIMONY	BDL	0.030	mg/L

ARSENIC GFAA (CLP) ILM01			
Analyst: A. ROBERTSON		Analysis Date: 07-SEP-93 Instrument: GFAA	
Prep: GFAA ACID DIGESTION OF AQUEOUS SAMPLES (CLP) ILM01 P930.6.0		Test: M903.2.0	
Prep: TOX CHAR LEACHING PROCEDURE (TCLP W/ ORGANICS) SW846-1311 P107.1.0			
Parameter	Result	Det. Limit	Units
ARSENIC	BDL	0.0020	mg/L

BARIUM ICP (CLP) ILM01			
Analyst: M. JAO		Analysis Date: 07-SEP-93 08:00 Instrument: ICP	
Prep: FAA OR ICP ACID DIGESTION OF AQUEOUS SAMPLES (CLP) ILM01 P930.4.0		Test: M904.3.0	
Prep: TOX CHAR LEACHING PROCEDURE (TCLP W/ ORGANICS) SW846-1311 P107.1.0			
Parameter	Result	Det. Limit	Units
BARIUM	0.69	0.010	mg/L

BERYLLIUM ICP (CLP) ILM01			
Analyst: M. JAO		Analysis Date: 07-SEP-93 08:00 Instrument: ICP	
Prep: FAA OR ICP ACID DIGESTION OF AQUEOUS SAMPLES (CLP) ILM01 P930.4.0		Test: M905.3.0	
Prep: TOX CHAR LEACHING PROCEDURE (TCLP W/ ORGANICS) SW846-1311 P107.1.0			
Parameter	Result	Det. Limit	Units
BERYLLIUM	BDL	0.0050	mg/L

PROJECT RECORD

CADMIUM ICP (CLP) ILM01

Analyst: M. JAO

Analysis Date: 07-SEP-93 08:00 Instrument: ICP

Test: M908.3.0

Prep: FAA OR ICP ACID DIGESTION OF AQUEOUS SAMPLES (CLP) ILM01 P930.4.0

Prep: TOX CHAR LEACHING PROCEDURE (TCLP W/ ORGANICS) SW846-1311 P107.1.0

Parameter	Result	Det. Limit	Units
CADMIUM	BDL	0.0050	mg/L

HEXAVALENT CHROMIUM SW846-7196A

Analyst: S. PFEFFER

Analysis Date: 07-SEP-93

Test: M110.6.0

Prep: TOX CHAR LEACHING PROCEDURE (TCLP W/ ORGANICS) SW846-1311 P107.1.0

Parameter	Result	Det. Limit	Units
HEXAVALENT CHROMIUM	BDL	0.01	mg/L

ANALYSIS FROM TCLP LEACHATE.

CHROMIUM ICP (CLP) ILM01

Analyst: M. JAO

Analysis Date: 10-SEP-93 08:00 Instrument: ICP

Test: M910.3.0

Prep: FAA OR ICP ACID DIGESTION OF AQUEOUS SAMPLES (CLP) ILM01 P930.4.1

Prep: TOX CHAR LEACHING PROCEDURE (TCLP W/ ORGANICS) SW846-1311 P107.1.0

Parameter	Result	Det. Limit	Units
CHROMIUM	0.022	0.010	mg/L

LEAD GFAA (CLP) ILM01

Analyst: J. WALLACE

Analysis Date: 10-SEP-93 Instrument: GFAA

Test: M916.2.0

Prep: GFAA ACID DIGESTION OF AQUEOUS SAMPLES (CLP) ILM01 P930.6.1

Prep: TOX CHAR LEACHING PROCEDURE (TCLP W/ ORGANICS) SW846-1311 P107.1.0

Parameter	Result	Det. Limit	Units
LEAD	BDL	0.0030	mg/L

MANGANESE ICP (CLP) ILM01

Analyst: M. JAO

Analysis Date: 10-SEP-93 08:00 Instrument: ICP

Test: M919.3.0

Prep: FAA OR ICP ACID DIGESTION OF AQUEOUS SAMPLES (CLP) ILM01 P930.4.1

Prep: TOX CHAR LEACHING PROCEDURE (TCLP W/ ORGANICS) SW846-1311 P107.1.0

Parameter	Result	Det. Limit	Units
MANGANESE	0.29	0.010	mg/L

MERCURY CVAA (CLP) ILM01

Analyst: G. MAPP

Analysis Date: 10-SEP-93 Instrument: CVAA

Test: M920.2.0

Prep: MERCURY CVAA ACID DIGESTION OF AQUEOUS SAMPLES (CLP) ILM01 P931.6.0

Prep: TOX CHAR LEACHING PROCEDURE (TCLP W/ ORGANICS) SW846-1311 P107.1.0

Parameter	Result	Det. Limit	Units
MERCURY	BDL	0.00050	mg/L

NICKEL ICP (CLP) ILM01

Analyst: M. JAO

Analysis Date: 07-SEP-93 08:00 Instrument: ICP

Test: M922.3.0

Prep: FAA OR ICP ACID DIGESTION OF AQUEOUS SAMPLES (CLP) ILM01 P930.4.0

Prep: TOX CHAR LEACHING PROCEDURE (TCLP W/ ORGANICS) SW846-1311 P107.1.0

Parameter	Result	Det. Limit	Units
NICKEL	0.011	0.010	mg/L

TIN ICP SW846-6010A

Analyst: M. JAO

Analysis Date: 10-SEP-93 08:00 Instrument: ICP

Test: M135.3.0

Prep: FAA OR ICP ACID DIGESTION OF AQUEOUS SAMPLES (CLP) ILM01 P930.4.1

Prep: TOX CHAR LEACHING PROCEDURE (TCLP W/ ORGANICS) SW846-1311 P107.1.0

Parameter	Result	Det. Limit	Units
TIN	BDL	0.050	mg/L

PROJECT RECORD

SILVER ICP (CLP) ILM01			
Analyst: N. JAO	Analysis Date: 10-SEP-93 08:00	Instrument: ICP	Test: M930.3.0
Prep: FAA OR ICP ACID DIGESTION OF AQUEOUS SAMPLES (CLP) ILM01 P930.4.1			
Prep: TOX CHAR LEACHING PROCEDURE (TCLP W/ ORGANICS) SW846-1311 P107.1.0			

Parameter	Result	Det. Limit	Units
SILVER	BDL	0.010	mg/L

SELENIUM GFAA (CLP) ILM01			
Analyst: N. BAUER	Analysis Date: 13-SEP-93	Instrument: GFAA	Test: M928.2.0
Prep: GFAA ACID DIGESTION OF AQUEOUS SAMPLES (CLP) ILM01 P930.6.1			
Prep: TOX CHAR LEACHING PROCEDURE (TCLP W/ ORGANICS) SW846-1311 P107.1.0			

Parameter	Result	Det. Limit	Units
SELENIUM	BDL	0.0050	mg/L

VANADIUM ICP (CLP) ILM01			
Analyst: N. JAO	Analysis Date: 07-SEP-93 08:00	Instrument: ICP	Test: M938.3.0
Prep: FAA OR ICP ACID DIGESTION OF AQUEOUS SAMPLES (CLP) ILM01 P930.4.0			
Prep: TOX CHAR LEACHING PROCEDURE (TCLP W/ ORGANICS) SW846-1311 P107.1.0			

Parameter	Result	Det. Limit	Units
VANADIUM	0.011	0.010	mg/L

ZINC ICP (CLP) ILM01			
Analyst: N. JAO	Analysis Date: 07-SEP-93 08:00	Instrument: ICP	Test: M939.3.0
Prep: FAA OR ICP ACID DIGESTION OF AQUEOUS SAMPLES (CLP) ILM01 P930.4.0			
Prep: TOX CHAR LEACHING PROCEDURE (TCLP W/ ORGANICS) SW846-1311 P107.1.0			

Parameter	Result	Det. Limit	Units
ZINC	0.47	0.020	mg/L

NEUTRAL WATER LEACHING METHOD (SW846-1310 MODIFIED) SW846-1310(MOD)			
Analyst: B. MAHN	Analysis Date: 02-SEP-93		Test: P105.1.0

Parameter	Result	Det. Limit	Units
TOTAL SAMPLE WEIGHT	100		Grams
LIQUID FRACTION (GRAMS)	NA		Grams
EXTRACTED SAMPLE	100		Grams
SOLIDS	100		Percent
9.5 MM SIEVE TEST			Passed
INITIAL PH	10.02		Std. Units
FINAL PH	9.23		Std. Units
INITIAL DI ADDED	1600		mL
FINAL DI ADDED	2000		mL
TOTAL ACID ADDED	NA		mL
VOLUME LIQUID (ADD BACK)	NA		mL
TOTAL VOLUME FILTRATE	2000		mL
INITIAL TIME	12582.7		Hours
FINAL TIME	12606.7		Hours

CYANIDE DISTILLATION (CLP) ILM01			
Analyst: J. STOKES	Analysis Date: 07-SEP-93		Test: P901.4.0
Prep: NEUTRAL WATER LEACHING METHOD (SW846-1310 MODIFIED) SW846-1310(MOD) P105.1.0			

Parameter	Result	Det. Limit	Units
INITIAL WEIGHT OR VOLUME	500		mL
FINAL VOLUME	250		mL

PROJECT RECORD

CYANIDE, TOTAL (AUTOMATED) (CLP) ILMO1

Analyst: J. WILDER

Analysis Date: 07-SEP-93

Instrument: AUTO-ANALYZER

Test: G901.4.0

mp: CYANIDE DISTILLATION (CLP) ILMO1 P901.4.0

ep: NEUTRAL WATER LEACHING METHOD (SW846-1310 MODIFIED) SW846-1310(MOD) P105.1.0

Parameter	Result	Det. Limit	Units
CYANIDE	BDL	0.005	mg/L

Sample Comments

THIS IS A MODIFIED REPORT. REPORT RE-ISSUED TO INCLUDE PYRIDINE AND 3-METHYLPHENOL. (BOTH NON-DETECTED IN SEMIVOLATILE ANALYSIS) CCB 10/12/93

BDL Below Detection Limit

EST Estimated Value

NA Not Applicable

RT Retention Time

Sample chain of custody number 14513.

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PROJECT RECORD

Quality Assurance Officer: _____



Page 8 (last page)

C E R T I F I C A T E O F A N A L Y S I S

Service Location TRITAGE LABORATORIES, INC. 301 W. MORRIS ST. INDIANAPOLIS, IN 46231 (317)243-8305	Received 27-SEP-93	Project 2471	Lab ID A291101
	Complete 12-OCT-93	PO Number 92005 *	
	Printed 13-OCT-93	Sampled 31-AUG-93	

Report To JIM FIFE AWD TECHNOLOGIES, INC. 3553 FOUNDERS RD C/O RESIDENCE INN INDIANAPOLIS, IN 46268	Bill To ACCOUNTS PAYABLE AWD TECHNOLOGIES, INC. BUILDING 3, SUITE 300 PENN CENTER WEST PITTSBURGH, PA 15276
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DESCRIPTION: ECC-04A1-PBM-01 LOCATION: ECC - ZIONSVILLE	Sample Description	<h1>PROJECT RECORD</h1>
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TOTAL AVAILABLE SULFIDE EXTRACTION SW 7.3.4.1 Analyst: L. WILSON Analysis Date: 28-SEP-93 Test: P116.2.0			
Parameter	Result	Det. Limit	Units
INITIAL WEIGHT OR VOLUME	10		Grams
FINAL VOLUME	100		mL

SULFIDE SW846-9030A Analyst: L. WILSON Analysis Date: 28-SEP-93 Test: G110.4.0 Prep: TOTAL AVAILABLE SULFIDE EXTRACTION SW 7.3.4.1 P116.2.0			
Parameter	Result	Det. Limit	Units
SULFIDE	BDL	10	mg/kg

PCB SONICATION EXTRACTION SW846-3550 Analyst: J. ISENBERG Analysis Date: 27-SEP-93 Test: P231.1.0			
Parameter	Result	Det. Limit	Units
INITIAL WEIGHT OR VOLUME	10.15		Grams
FINAL VOLUME	100		mL

POLYCHLORINATED BIPHENYLS (PCBS) SW846-8080 Analyst: L. WILLIAMS Analysis Date: 28-SEP-93 Instrument: GC/ECD Test: Q301.2.0 Prep: PCB SONICATION EXTRACTION SW846-3550 P231.1.0			
Parameter	Result	Det. Limit	Units
PCB AROCHLOR 1016	BDL	1.0	mg/kg
PCB AROCHLOR 1221	BDL	5.0	mg/kg
PCB AROCHLOR 1232	BDL	1.0	mg/kg
PCB AROCHLOR 1242	BDL	1.0	mg/kg
PCB AROCHLOR 1248	BDL	1.0	mg/kg
PCB AROCHLOR 1254	BDL	1.0	mg/kg
PCB AROCHLOR 1260	BDL	1.0	mg/kg
PCB AROCHLOR 1262	BDL	1.0	mg/kg

Below Detection Limit	Sample Comments
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Sample Comments

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without the written approval of the lab.*

PROJECT RECORD

Quality Assurance Officer: _____



CERTIFICATE OF ANALYSIS

Service Location HERITAGE LABORATORIES, INC. 901 W. MORRIS ST. INDIANAPOLIS, IN 46231 (317)243-8305	Received	Project	Lab ID
	31-AUG-93	2471	A288830
	Complete	PO Number	
	17-SEP-93	92005 *	
	Printed	Sampled	
	12-OCT-93	31-AUG-93 13:40	

Report To JIM FIFE AWD TECHNOLOGIES, INC. 3553 FOUNDERS RD C/O RESIDENCE INN INDIANAPOLIS, IN 46268	Bill To ACCOUNTS PAYABLE AWD TECHNOLOGIES, INC. BUILDING 3, SUITE 300 PENN CENTER WEST PITTSBURGH, PA 15276
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SAMPLE I.D.: ECC-04A1-PBM-02 DESCRIPTION: FIBERGLASS LOCATION: ECC -ZIONSVILLE	Sample Description <h2 style="margin: 0;">PROJECT RECORD</h2>
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ZERO HEADSPACE EXTRACTION (TCLP) SW846-1311 Analyst: G. WILSON Analysis Date: 03-SEP-93 Test: P108.1.0			
Parameter	Result	Det. Limit	Units
TOTAL SAMPLE WEIGHT	7.5		Grams
LIQUID FRACTION (GRAMS)	NA		Grams
LIQUID PORTION	NA		mL
EXTRACTED SAMPLE	7.5		Grams
PHASE ONE VOLUME (REP 0)	147.2		mL
PHASE TWO VOLUME (REP 1)	NA		mL

CLP VOLATILE ORGANICS OLMOI Analyst: G. WILSON Analysis Date: 07-SEP-93 09:19 Instrument: GC/MS VOA Test: 0902.2.0 Prep: ZERO HEADSPACE EXTRACTION (TCLP) SW846-1311 P108.1.0			
Parameter	Result	Det. Limit	Units
CHLOROMETHANE	BDL	100	ug/L
BROMOMETHANE	BDL	100	ug/L
VINYL CHLORIDE	BDL	100	ug/L
CHLOROETHANE	BDL	100	ug/L
METHYLENE CHLORIDE	BDL	100	ug/L
ACETONE	BDL	100	ug/L
CARBON DISULFIDE	BDL	100	ug/L
1,1-DICHLOROETHENE	BDL	100	ug/L
1,1-DICHLOROETHANE	BDL	100	ug/L
1,2-DICHLOROETHENE (TOTAL)	BDL	100	ug/L
CHLOROFORM	BDL	100	ug/L
1,2-DICHLOROETHANE	BDL	100	ug/L
2-BUTANONE	BDL	100	ug/L
1,1,1-TRICHLOROETHANE	BDL	100	ug/L
CARBON TETRACHLORIDE	BDL	100	ug/L
BROMODICHLOROMETHANE	BDL	100	ug/L
1,2-DICHLOROPROPANE	BDL	100	ug/L
1,1,3-DICHLOROPROPENE	BDL	100	ug/L
1,1-DICHLOROETHENE	BDL	100	ug/L
1,1,2-TRICHLOROETHANE	BDL	100	ug/L
BENZENE	BDL	100	ug/L

Parameter	Result	Det. Limit	Units
TRANS-1,3-DICHLOROPROPENE	BDL	100	ug/L
MOFORM	BDL	100	ug/L
METHYL-2-PENTANONE	BDL	100	ug/L
2-HEXANONE	BDL	100	ug/L
TETRACHLOROETHENE	BDL	100	ug/L
TOLUENE	BDL	100	ug/L
1,1,2,2-TETRACHLOROETHANE	BDL	100	ug/L
CHLOROBENZENE	BDL	100	ug/L
ETHYLBENZENE	BDL	100	ug/L
STYRENE	BDL	100	ug/L
XYLENE (TOTAL)	BDL	100	ug/L
SURROGATE RECOVERY			

DICHLOROETHANE-D4	113		% Rec
TOLUENE-D8	100		% Rec
BROMOFLUOROBENZENE	105		% Rec
1:10 DILUTION.			

TOX CHAR LEACHING PROCEDURE (TCLP W/ ORGANICS) SW846-1311

Analyst: B. NAHN

Analysis Date: 08-SEP-93

Test: P107.1.0

Parameter	Result	Det. Limit	Units
TOTAL SAMPLE WEIGHT	100		Grams
LIQUID FRACTION (GRAMS)	NA		Grams
EXTRACTED SAMPLE	100		Grams
SOLIDS	100		Percent
MM SIEVE TEST			Passed
INITIAL PH	3.77		Std. Units
ADJUSTED PH	NA		Std. Units
BUFFER SOLUTION PH	4.95		Std. Units
FINAL PH	4.86		Std. Units
VOLUME BUFFERED SOLUTION	2000		mL
VOLUME EXTRACT FILTERED	2000		mL
LIQUID FRACTION	NA		mL
TOTAL VOLUME FILTRATE	2000		mL
AMBIENT TEMPERATURE	22		Degrees C
INITIAL TIME	8086.6		HRS
FINAL TIME	8102.9		HRS
PHASE 0 VOLUME (REP 0)	NA		mL
PHASE 0 WEIGHT	NA		Grams
PHASE 0 DENSITY	NA		g/mL
PHASE 1 VOLUME (REP 1)	NA		mL
PHASE 1 WEIGHT	NA		Grams
PHASE 1 DENSITY	NA		g/mL

CLP SEMI-VOLATILE EXTRACTION OLMO1

Analyst: C. KING

Analysis Date: 09-SEP-93

Test: P901.2.0

Prep: TOX CHAR LEACHING PROCEDURE (TCLP W/ ORGANICS) SW846-1311 P107.1.0

Parameter	Result	Det. Limit	Units
INITIAL WEIGHT OR VOLUME	1000		mL
FINAL VOLUME	1.0		mL

PROJECT RECORD

CLP SEMI-VOLATILE ORGANICS OLMO1

Analyst: A. BRADBURN

Analysis Date: 14-SEP-93 15:43 Instrument: GC/MS SVOA

Test: 0901.2.0

ep: CLP SEMI-VOLATILE EXTRACTION OLMO1 P901.2.0

ep: TOX CHAR LEACHING PROCEDURE (TCLP W/ ORGANICS) SW846-1311 P107.1.0

Parameter	Result	Det. Limit	Units
PHENOL	12	10	ug/L
BIS(2-CHLOROETHYL)ETHER	BDL	10	ug/L
2-CHLOROPHENOL	BDL	10	ug/L
1,3-DICHLOROBENZENE	BDL	10	ug/L
1,4-DICHLOROBENZENE	BDL	10	ug/L
1,2-DICHLOROBENZENE	BDL	10	ug/L
2-METHYLPHENOL	BDL	10	ug/L
BIS(2-CHLOROISOPROPYL)ETHER	BDL	10	ug/L
4-METHYLPHENOL	BDL	10	ug/L
N-NITROSO-DI-N-PROPYLAMINE	BDL	10	ug/L
HEXACHLOROETHANE	BDL	10	ug/L
NITROBENZENE	BDL	10	ug/L
ISOPHORONE	BDL	10	ug/L
2-NITROPHENOL	BDL	10	ug/L
2,4-DIMETHYLPHENOL	BDL	10	ug/L
BIS(2-CHLOROETHOXY)METHANE	BDL	10	ug/L
2,4-DICHLOROPHENOL	BDL	10	ug/L
1,2,4-TRICHLOROBENZENE	BDL	10	ug/L
NAPHTHALENE	BDL	10	ug/L
4-CHLOROANILINE	BDL	10	ug/L
HEXACHLOROBUTADIENE	BDL	10	ug/L
4-CHLORO-3-METHYLPHENOL	BDL	10	ug/L
2-METHYLNAPHTHALENE	BDL	10	ug/L
1,4-DICHLOROCYCLOPENTADIENE	BDL	10	ug/L
1,2,4,5-TETRACHLOROPHENOL	BDL	10	ug/L
2,4,6-TRICHLOROPHENOL	BDL	10	ug/L
2,4,5-TRICHLOROPHENOL	BDL	25	ug/L
2-CHLORONAPHTHALENE	BDL	10	ug/L
2-NITROANILINE	BDL	25	ug/L
DIMETHYLPHTHALATE	BDL	10	ug/L
ACENAPHTHYLENE	BDL	10	ug/L
2,6-DINITROTOLUENE	BDL	10	ug/L
3-NITROANILINE	BDL	25	ug/L
ACENAPHTHENE	BDL	10	ug/L
2,4-DINITROPHENOL	BDL	25	ug/L
4-NITROPHENOL	BDL	25	ug/L
DIBENZOFURAN	BDL	10	ug/L
2,4-DINITROTOLUENE	BDL	10	ug/L
DIETHYLPHTHALATE	BDL	10	ug/L
4-CHLOROPHENYLPHENYLETHER	BDL	10	ug/L
FLUORENE	BDL	10	ug/L
4-NITROANILINE	BDL	25	ug/L
4,6-DINITRO-2-METHYLPHENOL	BDL	25	ug/L
N-NITROSO-DIPHENYLAMINE	BDL	10	ug/L
4-BROMOPHENYLPHENYLETHER	BDL	10	ug/L
HEXACHLOROENZENE	BDL	10	ug/L
PENTACHLOROPHENOL	BDL	25	ug/L
PHENANTHRENE	BDL	10	ug/L
ANTHRACENE	BDL	10	ug/L
INDOLE	BDL	10	ug/L
N-BUTYLPHTHALATE	BDL	10	ug/L
FLORANTHENE	BDL	10	ug/L
PYRENE	BDL	10	ug/L
BENZYL BUTYL PHTHALATE	13	10	ug/L

PROJECT RECORD

Parameter	Result	Det. Limit	Units
3,3'-DICHLOROBENZIDINE	BDL	10	ug/L
Z(A)ANTHRACENE	BDL	10	ug/L
RYSENE	BDL	10	ug/L
BIS(2-ETHYLHEXYL)PHTHALATE	BDL	10	ug/L
DI-N-OCTYLPHTHALATE	BDL	10	ug/L
BENZO(B)FLUORANTHENE	BDL	10	ug/L
BENZO(K)FLUORANTHENE	BDL	10	ug/L
BENZO(A)PYRENE	BDL	10	ug/L
INDENO(1,2,3-CD)PYRENE	BDL	10	ug/L
DIBENZ(A,H)ANTHRACENE	BDL	10	ug/L
BENZO(G,H,I)PERYLENE	BDL	10	ug/L
PYRIDINE	BDL	50	ug/L
3-METHYLPHENOL (M-CRESOL)	BDL	10	ug/L
SURROGATE RECOVERY			

2-FLUOROPHENOL	76		% Rec
PHENOL-D5	79		% Rec
NITROBENZENE-D5	91		% Rec
2-CHLOROPHENOL-D4	83		% Rec
2-FLUOROBIPHENYL	97		% Rec
2,4,6-TRIBROMOPHENOL	95		% Rec
TERPHENYL-D14	135		% Rec
1,2-DICHLOROBENZENE-D4	65		% Rec

ALSO DETECTED			

UNKNOWN	EST 83 RT=7.09		ug/L
UNKNOWN	EST 116 RT=9.1		ug/L
UNKNOWN	EST 96 RT=11.7		ug/L
UNKNOWN	EST 120 RT=16.66		ug/L
UNKNOWN	EST 40 RT=16.73		ug/L
4-HYDROXY-BENZALDEHYDE	EST 150 RT=17.16		ug/L
UNKNOWN ACID	EST 56 RT=18.03		ug/L
4-METHYL-1,2-BENZENEDICARBOXYLIC ACID	EST 46 RT=18.25		ug/L
UNKNOWN	EST 79 RT=19.27		ug/L
UNKNOWN	EST 41 RT=19.34		ug/L
UNKNOWN	EST 78 RT=19.54		ug/L
UNKNOWN	EST 120 RT=19.84		ug/L
UNKNOWN	EST 45 RT=19.96		ug/L
UNKNOWN	EST 38 RT=20.08		ug/L
UNKNOWN	EST 44 RT=20.28		ug/L
UNKNOWN	EST 66 RT=20.37		ug/L
NONANEDIOIC ACID	EST 160 RT=20.51		ug/L
UNKNOWN	EST 37 RT=23.76		ug/L
1,8-NAPHTHALIC ANHYDRIDE	EST 36 RT=24.58		ug/L

CLP SEMI-VOLATILE ORGANICS OLM01

Analyst: A. BRADBURN Analysis Date: 15-SEP-93 14:05 Instrument: GC/MS SVOA
 Prep: CLP SEMI-VOLATILE EXTRACTION OLM01 P901.2.0
 Prep: TOX CHAR LEACHING PROCEDURE (TCLP W/ ORGANICS) SW846-1311 P107.1.0

Test: 0901.2.1

Parameter	Result	Det. Limit	Units
PHENOL	BDL	10	ug/L
(2-CHLOROETHYL) PHENOL	BDL	10	ug/L
CHLOROPHENOL	BDL	10	ug/L
1,3-DICHLOROBENZENE	BDL	10	ug/L
1,4-DICHLOROBENZENE	BDL	10	ug/L
1,2-DICHLOROBENZENE	BDL	10	ug/L

PROJECT RECORD

Parameter	Result	Det. Limit	Units
2-METHYLPHENOL	BDL	10	ug/L
1-(2-CHLOROISOPROPYL)ETHER	BDL	10	ug/L
1-METHYLPHENOL	BDL	10	ug/L
N-NITROSO-DI-N-PROPYLAMINE	BDL	10	ug/L
HEXACHLOROETHANE	BDL	10	ug/L
NITROBENZENE	BDL	10	ug/L
ISOPHORONE	BDL	10	ug/L
2-NITROPHENOL	BDL	10	ug/L
2,4-DIMETHYLPHENOL	BDL	10	ug/L
BIS(2-CHLOROETHOXY)METHANE	BDL	10	ug/L
2,4-DICHLOROPHENOL	BDL	10	ug/L
1,2,4-TRICHLOROBENZENE	BDL	10	ug/L
NAPHTHALENE	BDL	10	ug/L
4-CHLOROANILINE	BDL	10	ug/L
HEXACHLOROBUTADIENE	BDL	10	ug/L
4-CHLORO-3-METHYLPHENOL	BDL	10	ug/L
2-METHYLNAPHTHALENE	BDL	10	ug/L
HEXACHLOROCYCLOPENTADIENE	BDL	10	ug/L
2,4,6-TRICHLOROPHENOL	BDL	10	ug/L
2,4,5-TRICHLOROPHENOL	BDL	25	ug/L
2-CHLORONAPHTHALENE	BDL	10	ug/L
2-NITROANILINE	BDL	25	ug/L
DIMETHYLPHTHALATE	BDL	10	ug/L
ACENAPHTHYLENE	BDL	10	ug/L
2,6-DINITROTOLUENE	BDL	10	ug/L
3-NITROANILINE	BDL	25	ug/L
1-NAPHTHENE	BDL	10	ug/L
1-DINITROPHENOL	BDL	25	ug/L
2-NITROPHENOL	BDL	25	ug/L
DIBENZOFURAN	BDL	10	ug/L
2,4-DINITROTOLUENE	BDL	10	ug/L
DIETHYLPHTHALATE	BDL	10	ug/L
4-CHLOROPHENYLPHENYLETHER	BDL	10	ug/L
FLUORENE	BDL	10	ug/L
4-NITROANILINE	BDL	25	ug/L
4,6-DINITRO-2-METHYLPHENOL	BDL	25	ug/L
N-NITROSO-DIPHENYLAMINE	BDL	10	ug/L
4-BROMOPHENYLPHENYLETHER	BDL	10	ug/L
HEXACHLOROBENZENE	BDL	10	ug/L
PENTACHLOROPHENOL	BDL	25	ug/L
PHENANTHRENE	BDL	10	ug/L
ANTHRACENE	BDL	10	ug/L
CARBAZOLE	BDL	10	ug/L
DI-N-BUTYLPHTHALATE	BDL	10	ug/L
FLOURANTHENE	BDL	10	ug/L
PYRENE	BDL	10	ug/L
BENZYL BUTYL PHTHALATE	14	10	ug/L
3,3'-DICHLOROBENZIDINE	BDL	10	ug/L
BENZ(A)ANTHRACENE	BDL	10	ug/L
CHRYSENE	BDL	10	ug/L
BIS(2-ETHYLHEXYL)PHTHALATE	BDL	10	ug/L
DI-N-OCTYLPHTHALATE	BDL	10	ug/L
1-ISO(B)FLUORANTHENE	BDL	10	ug/L
1-ISO(K)FLUORANTHENE	BDL	10	ug/L
BENZO(A)PYRENE	BDL	10	ug/L
INDENO(1,2,3-CD)PYRENE	BDL	10	ug/L
DIBENZ(A,H)ANTHRACENE	BDL	10	ug/L

PROJECT RECORD

Parameter	Result	Det. Limit	Units
PERFLUOROPERYLENE PROXIMATE RECOVERY	BDL	10	ug/L

2-FLUOROPHENOL	10		% Rec
PHENOL-D5	44		% Rec
NITROBENZENE-D5	54		% Rec
2-CHLOROPHENOL-D4	43		% Rec
2-FLUOROBIPHENYL	80		% Rec
2,4,6-TRIBROMOPHENOL	107		% Rec
TERPHENYL-D14	137		% Rec
1,2-DICHLOROBENZENE-D4	54		% Rec
TICS ARE NOT QUANTIFIED ON RE-ANALYSIS.			

FAA OR ICP ACID DIGESTION OF AQUEOUS SAMPLES (CLP) ILM01

Analyst: E. MERRILL

Analysis Date: 09-SEP-93

Test: P930.4.0

Prep: TOX CHAR LEACHING PROCEDURE (TCLP W/ ORGANICS) SU846-1311 P107.1.0

Parameter	Result	Det. Limit	Units
INITIAL WEIGHT OR VOLUME	50		mL
FINAL WEIGHT OR VOLUME	50		mL

GFAA ACID DIGESTION OF AQUEOUS SAMPLES (CLP) ILM01

Analyst: C. COFFEY

Analysis Date: 09-SEP-93

Test: P930.6.0

Prep: TOX CHAR LEACHING PROCEDURE (TCLP W/ ORGANICS) SU846-1311 P107.1.0

Parameter	Result	Det. Limit	Units
INITIAL WEIGHT OR VOLUME	50		mL
FINAL WEIGHT OR VOLUME	50		mL

MERCURY CVAA ACID DIGESTION OF AQUEOUS SAMPLES (CLP) ILM01

Analyst: R. BYERS

Analysis Date: 09-SEP-93

Test: P931.6.0

Prep: TOX CHAR LEACHING PROCEDURE (TCLP W/ ORGANICS) SU846-1311 P107.1.0

Parameter	Result	Det. Limit	Units
INITIAL WEIGHT OR VOLUME	100		mL
FINAL VOLUME	100		mL

ANTIMONY ICP (CLP) ILM01

Analyst: M. JAO

Analysis Date: 10-SEP-93 08:00 Instrument: ICP

Test: M902.3.0

Prep: FAA OR ICP ACID DIGESTION OF AQUEOUS SAMPLES (CLP) ILM01 P930.4.0

Prep: TOX CHAR LEACHING PROCEDURE (TCLP W/ ORGANICS) SU846-1311 P107.1.0

Parameter	Result	Det. Limit	Units
ANTIMONY	0.047	0.030	mg/L

ARSENIC GFAA (CLP) ILM01

Analyst: A. ROBERTSON

Analysis Date: 10-SEP-93 Instrument: GFAA

Test: M903.2.0

Prep: GFAA ACID DIGESTION OF AQUEOUS SAMPLES (CLP) ILM01 P930.6.0

Prep: TOX CHAR LEACHING PROCEDURE (TCLP W/ ORGANICS) SU846-1311 P107.1.0

Parameter	Result	Det. Limit	Units
ARSENIC 1:4 DILUTION	BDL	0.020	mg/L

PROJECT RECORD

BARIUM ICP (CLP) ILM01

Analyst: M. JAO Analysis Date: 10-SEP-93 08:00 Instrument: ICP Test: M904.3.0
 ep: FAA OR ICP ACID DIGESTION OF AQUEOUS SAMPLES (CLP) ILM01 P930.4.0
 ep: TOX CHAR LEACHING PROCEDURE (TCLP W/ ORGANICS) SW846-1311 P107.1.0

Parameter	Result	Det. Limit	Units
BARIUM	0.90	0.010	mg/L

BERYLLIUM ICP (CLP) ILM01

Analyst: M. JAO Analysis Date: 13-SEP-93 08:00 Instrument: ICP Test: M905.3.0
 Prep: FAA OR ICP ACID DIGESTION OF AQUEOUS SAMPLES (CLP) ILM01 P930.4.0
 Prep: TOX CHAR LEACHING PROCEDURE (TCLP W/ ORGANICS) SW846-1311 P107.1.0

Parameter	Result	Det. Limit	Units
BERYLLIUM	BDL	0.0050	mg/L

CADMIUM ICP (CLP) ILM01

Analyst: M. JAO Analysis Date: 10-SEP-93 08:00 Instrument: ICP Test: M908.3.0
 Prep: FAA OR ICP ACID DIGESTION OF AQUEOUS SAMPLES (CLP) ILM01 P930.4.0
 Prep: TOX CHAR LEACHING PROCEDURE (TCLP W/ ORGANICS) SW846-1311 P107.1.0

Parameter	Result	Det. Limit	Units
CADMIUM	0.21	0.0050	mg/L

HEXAVALENT CHROMIUM SW846-7196A

Analyst: S. PFEFFER Analysis Date: 15-SEP-93 Test: M110.6.0
 Prep: TOX CHAR LEACHING PROCEDURE (TCLP W/ ORGANICS) SW846-1311 P107.1.0

Parameter	Result	Det. Limit	Units
HEXAVALENT CHROMIUM	BDL	0.05	mg/L

1:5 dilution due to color interference.

CHROMIUM ICP (CLP) ILM01

Analyst: M. JAO Analysis Date: 10-SEP-93 08:00 Instrument: ICP Test: M910.3.0
 Prep: FAA OR ICP ACID DIGESTION OF AQUEOUS SAMPLES (CLP) ILM01 P930.4.0
 Prep: TOX CHAR LEACHING PROCEDURE (TCLP W/ ORGANICS) SW846-1311 P107.1.0

Parameter	Result	Det. Limit	Units
CHROMIUM	0.048	0.010	mg/L

LEAD GFAA (CLP) ILM01

Analyst: J. WALLACE Analysis Date: 10-SEP-93 Instrument: GFAA Test: M916.2.0
 Prep: GFAA ACID DIGESTION OF AQUEOUS SAMPLES (CLP) ILM01 P930.6.0
 Prep: TOX CHAR LEACHING PROCEDURE (TCLP W/ ORGANICS) SW846-1311 P107.1.0

Parameter	Result	Det. Limit	Units
LEAD	0.36	0.12	mg/L

1:40 DILUTION

MANGANESE ICP (CLP) ILM01

Analyst: M. JAO Analysis Date: 10-SEP-93 08:00 Instrument: ICP Test: M919.3.0
 Prep: FAA OR ICP ACID DIGESTION OF AQUEOUS SAMPLES (CLP) ILM01 P930.4.0
 Prep: TOX CHAR LEACHING PROCEDURE (TCLP W/ ORGANICS) SW846-1311 P107.1.0

Parameter	Result	Det. Limit	Units
MANGANESE	2.2	0.010	mg/L

PROJECT RECORD

MERCURY CVAA (CLP) ILM01

Analyst: G. MAPP

Analysis Date: 10-SEP-93

Instrument: CVAA

Test: M920.2.0

Prep: MERCURY CVAA ACID DIGESTION OF AQUEOUS SAMPLES (CLP) ILM01 P931.6.0

Prep: TOX CHAR LEACHING PROCEDURE (TCLP W/ ORGANICS) SW846-1311 P107.1.0

Parameter	Result	Det. Limit	Units
MERCURY	BDL	0.00050	mg/L

NICKEL ICP (CLP) ILM01

Analyst: M. JAO

Analysis Date: 10-SEP-93 08:00

Instrument: ICP

Test: M922.3.0

Prep: FAA OR ICP ACID DIGESTION OF AQUEOUS SAMPLES (CLP) ILM01 P930.4.0

Prep: TOX CHAR LEACHING PROCEDURE (TCLP W/ ORGANICS) SW846-1311 P107.1.0

Parameter	Result	Det. Limit	Units
NICKEL	0.14	0.010	mg/L

TIN ICP SW846-6010A

Analyst: M. JAO

Analysis Date: 10-SEP-93 08:00

Instrument: ICP

Test: M135.3.0

Prep: FAA OR ICP ACID DIGESTION OF AQUEOUS SAMPLES (CLP) ILM01 P930.4.0

Prep: TOX CHAR LEACHING PROCEDURE (TCLP W/ ORGANICS) SW846-1311 P107.1.0

Parameter	Result	Det. Limit	Units
TIN	BDL	0.050	mg/L

SILVER ICP (CLP) ILM01

Analyst: M. JAO

Analysis Date: 10-SEP-93 08:00

Instrument: ICP

Test: M930.3.0

Prep: FAA OR ICP ACID DIGESTION OF AQUEOUS SAMPLES (CLP) ILM01 P930.4.0

Prep: TOX CHAR LEACHING PROCEDURE (TCLP W/ ORGANICS) SW846-1311 P107.1.0

Parameter	Result	Det. Limit	Units
SILVER	BDL	0.010	mg/L

SELENIUM GFAA (CLP) ILM01

Analyst: M. BAUER

Analysis Date: 13-SEP-93

Instrument: GFAA

Test: M928.2.0

Prep: GFAA ACID DIGESTION OF AQUEOUS SAMPLES (CLP) ILM01 P930.6.0

Prep: TOX CHAR LEACHING PROCEDURE (TCLP W/ ORGANICS) SW846-1311 P107.1.0

Parameter	Result	Det. Limit	Units
SELENIUM	BDL	0.010	mg/L

1:2 DILUTION

VANADIUM ICP (CLP) ILM01

Analyst: M. JAO

Analysis Date: 10-SEP-93 08:00

Instrument: ICP

Test: M938.3.0

Prep: FAA OR ICP ACID DIGESTION OF AQUEOUS SAMPLES (CLP) ILM01 P930.4.0

Prep: TOX CHAR LEACHING PROCEDURE (TCLP W/ ORGANICS) SW846-1311 P107.1.0

Parameter	Result	Det. Limit	Units
VANADIUM	BDL	0.010	mg/L

ZINC ICP (CLP) ILM01

Analyst: M. JAO

Analysis Date: 10-SEP-93 08:00

Instrument: ICP

Test: M939.3.0

Prep: FAA OR ICP ACID DIGESTION OF AQUEOUS SAMPLES (CLP) ILM01 P930.4.0

Prep: TOX CHAR LEACHING PROCEDURE (TCLP W/ ORGANICS) SW846-1311 P107.1.0

Parameter	Result	Det. Limit	Units
ZINC	40.	0.020	mg/L

NEUTRAL WATER LEACHING METHOD (SW846-1310 MODIFIED) SW846-1310(MOD)

Analyst: E. NAHN

Analysis Date: 08-SEP-93

Test: P105.1.0

Parameter	Result	Det. Limit	Units
TOTAL SAMPLE WEIGHT	100		Grams
LIQUID FRACTION (GRAMS)	NA		Grams
EXTRACTED SAMPLE	100		Grams
SOLIDS			Percent

PROJECT RECORD

Parameter	Result	Det. Limit	Units
9.5 MM SIEVE TEST			Passed
INITIAL PH	3.99		Std. Units
FINAL PH	4.34		Std. Units
INITIAL DI ADDED	1600		mL
FINAL DI ADDED	2000		mL
TOTAL ACID ADDED	NA		mL
VOLUME LIQUID (ADD BACK)	NA		mL
TOTAL VOLUME FILTRATE	2000		mL
INITIAL TIME	10104.4		Hours
FINAL TIME	10128.3		Hours

CYANIDE DISTILLATION (CLP) ILM01

Analyst: J. STOKES

Analysis Date: 10-SEP-93

Test: P901.4.0

Prep: NEUTRAL WATER LEACHING METHOD (SW846-1310 MODIFIED) SW846-1310(MOD) P105.1.0

Parameter	Result	Det. Limit	Units
INITIAL WEIGHT OR VOLUME	500		mL
FINAL VOLUME	250		mL

CYANIDE, TOTAL (AUTOMATED) (CLP) ILM01

Analyst: J. WILDER

Analysis Date: 10-SEP-93

Instrument: AUTO-ANALYZER

Test: G901.4.0

Prep: CYANIDE DISTILLATION (CLP) ILM01 P901.4.0

Prep: NEUTRAL WATER LEACHING METHOD (SW846-1310 MODIFIED) SW846-1310(MOD) P105.1.0

Parameter	Result	Det. Limit	Units
CYANIDE	BDL	0.005	mg/L

Sample Comments

ADDITIONAL SAMPLE WAS RECEIVED INTO THE LABORATORY ON 09/07/93. IT WAS
 SAMPLED ON 09/07/93 AT 10:15AM. DCE
 THIS IS A MODIFIED REPORT. REPORT RE-ISSUED TO INCLUDE PYRIDINE AND
 3-METHYLPHENOL. (BOTH NON-DETECTED IN SEMIVOLATILE ANALYSIS) CCB 10/12/93

BDL Below Detection Limit
 EST Estimated Value
 NA Not Applicable
 RT Retention Time

Sample chain of custody number 14513.

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 without the written approval of the lab.

PROJECT RECORD



C E R T I F I C A T E O F A N A L Y S I S

Service Location TRITAGE LABORATORIES, INC. 901 W. MORRIS ST. INDIANAPOLIS, IN 46231 (317)243-8305	Received 27-SEP-93	Project 2471	Lab ID A291099
	Complete 13-OCT-93	PO Number 92005 *	
	Printed 13-OCT-93	Sampled 07-SEP-93	

Report To JIM FIFE AWD TECHNOLOGIES, INC. 3553 FOUNDERS RD C/O RESIDENCE INN INDIANAPOLIS, IN 46268	Bill To ACCOUNTS PAYABLE AWD TECHNOLOGIES, INC. BUILDING 3, SUITE 300 PENN CENTER WEST PITTSBURGH, PA 15276
--	--

Sample Description

DESCRIPTION: ECC-04A1-PBM-02
 LOCATION: ECC - ZIONSVILLE

TOTAL AVAILABLE SULFIDE EXTRACTION SW 7.3.4.1 Analyst: L. WILSON Analysis Date: 28-SEP-93 Test: P116.2.0			
Parameter	Result	Det. Limit	Units
INITIAL WEIGHT OR VOLUME	10		Grams
FINAL VOLUME	100		mL

SULFIDE SW846-9030A Analyst: L. WILSON Analysis Date: 28-SEP-93 Test: G110.4.0 Prep: TOTAL AVAILABLE SULFIDE EXTRACTION SW 7.3.4.1 P116.2.0			
Parameter	Result	Det. Limit	Units
SULFIDE	BDL	10	mg/kg

PCB SONICATION EXTRACTION SW846-3550 Analyst: J. ISEBERG Analysis Date: 27-SEP-93 Test: P231.1.0			
Parameter	Result	Det. Limit	Units
INITIAL WEIGHT OR VOLUME	9.86		Grams
FINAL VOLUME	100		mL

POLYCHLORINATED BIPHENYLS (PCBS) SW846-8080 Analyst: L. WILLIAMS Analysis Date: 28-SEP-93 Instrument: GC/ECD Test: Q301.2.0 Prep: PCB SONICATION EXTRACTION SW846-3550 P231.1.0			
Parameter	Result	Det. Limit	Units
PCB AROCHLOR 1016	BDL	1.0	mg/kg
PCB AROCHLOR 1221	BDL	5.0	mg/kg
PCB AROCHLOR 1232	BDL	1.0	mg/kg
PCB AROCHLOR 1242	BDL	1.0	mg/kg
PCB AROCHLOR 1248	BDL	1.0	mg/kg
PCB AROCHLOR 1254	BDL	1.0	mg/kg
PCB AROCHLOR 1260	BDL	1.0	mg/kg
PCB AROCHLOR 1262	BDL	1.0	mg/kg

Sample Comments

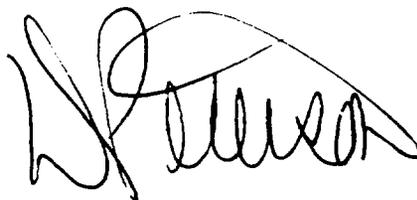
Below Detection Limit

PROJECT RECORD

Sample Comments

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thout the written approval of the lab.*

PROJECT RECORD



Quality Assurance Officer: _____

C E R T I F I C A T E O F A N A L Y S I S

Service Location TRITAGE LABORATORIES, INC. 101 W. MORRIS ST. INDIANAPOLIS, IN 46231 (317)243-8305	Received	Project	Lab ID
	31-AUG-93	2471	A288944
	Complete	PO Number	
	17-SEP-93	92005 *	
	Printed	Sampled	
	12-OCT-93	31-AUG-93 14:40	

Report To	Bill To
JIM FIFE AWD TECHNOLOGIES, INC. 3553 FOUNDERS RD C/O RESIDENCE INN INDIANAPOLIS, IN 46268	ACCOUNTS PAYABLE AWD TECHNOLOGIES, INC. BUILDING 3, SUITE 300 PENN CENTER WEST PITTSBURGH, PA 15276

SAMPLE I.D.: ECC-04A1-PBM-03 DESCRIPTION: STYROFOAM LOCATION: ECC -ZIONSVILLE	Sample Description <h1>PROJECT RECORD</h1>
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ZERO HEADSPACE EXTRACTION (TCLP) SW846-1311			
Analyst: G. WILSON	Analysis Date: 03-SEP-93	Test: P108.1.0	
Parameter	Result	Det. Limit	Units
TOTAL SAMPLE WEIGHT	8.9		Grams
LIQUID FRACTION (GRAMS)	NA		Grams
LIQUID PORTION	NA		mL
EXTRACTED SAMPLE	8.9		Grams
PHASE ONE VOLUME (REP 0)	171.4		mL
PHASE TWO VOLUME (REP 1)	NA		mL

CLP VOLATILE ORGANICS OLMO1			
Analyst: G. WILSON	Analysis Date: 07-SEP-93 10:08	Instrument: GC/MS VOA	Test: 0902.2.0
Prep: ZERO HEADSPACE EXTRACTION (TCLP) SW846-1311 P108.1.0			
Parameter	Result	Det. Limit	Units
CHLOROMETHANE	200	100	ug/L
BROMOMETHANE	BDL	100	ug/L
VINYL CHLORIDE	BDL	100	ug/L
CHLOROETHANE	BDL	100	ug/L
METHYLENE CHLORIDE	BDL	100	ug/L
ACETONE	BDL	100	ug/L
CARBON DISULFIDE	BDL	100	ug/L
1,1-DICHLOROETHENE	BDL	100	ug/L
1,1-DICHLOROETHANE	BDL	100	ug/L
1,2-DICHLOROETHENE (TOTAL)	BDL	100	ug/L
CHLOROFORM	BDL	100	ug/L
1,2-DICHLOROETHANE	BDL	100	ug/L
2-BUTANONE	BDL	100	ug/L
1,1,1-TRICHLOROETHANE	BDL	100	ug/L
CARBON TETRACHLORIDE	BDL	100	ug/L
BROMODICHLOROMETHANE	BDL	100	ug/L
1,2-DICHLOROPROPANE	BDL	100	ug/L
1,1,3-DICHLOROPROPENE	BDL	100	ug/L
1,1-DICHLOROETHENE	BDL	100	ug/L
1,1,2-TRICHLOROETHANE	BDL	100	ug/L
BENZENE	BDL	100	ug/L

Parameter	Result	Det. Limit	Units
TRANS-1,3-DICHLOROPROPENE	BDL	100	ug/L
DMOFORM	BDL	100	ug/L
METHYL-2-PENTANONE	BDL	100	ug/L
2-HEXANONE	BDL	100	ug/L
TETRACHLOROETHENE	BDL	100	ug/L
TOLUENE	BDL	100	ug/L
1,1,2,2-TETRACHLOROETHANE	BDL	100	ug/L
CHLOROBENZENE	BDL	100	ug/L
ETHYLBENZENE	BDL	100	ug/L
STYRENE	BDL	100	ug/L
XYLENE (TOTAL)	BDL	100	ug/L
SURROGATE RECOVERY			

DICHLOROETHANE-D4	114		% Rec
TOLUENE-D8	95		% Rec
BROMOFLUOROBENZENE	102		% Rec
1:10 DILUTION.			

TOX CHAR LEACHING PROCEDURE (TCLP W/ ORGANICS) SW846-1311			
Analyst: B. HAHN		Analysis Date: 08-SEP-93	
		Test: P107.1.0	
Parameter	Result	Det. Limit	Units
TOTAL SAMPLE WEIGHT	100		Grams
LIQUID FRACTION (GRAMS)	NA		Grams
EXTRACTED SAMPLE	100		Grams
SOLIDS	100		Percent
5 MM SIEVE TEST			Passed
INITIAL PH	7.30		Std. Units
ADJUSTED PH	1.41		Std. Units
BUFFER SOLUTION PH	4.95		Std. Units
FINAL PH	5.15		Std. Units
VOLUME BUFFERED SOLUTION	2000		mL
VOLUME EXTRACT FILTERED	2000		mL
LIQUID FRACTION	NA		mL
TOTAL VOLUME FILTRATE	2000		mL
AMBIENT TEMPERATURE	22		Degrees C
INITIAL TIME	8086.6		HRS
FINAL TIME	8102.9		HRS
PHASE 0 VOLUME (REP 0)	NA		mL
PHASE 0 WEIGHT	NA		Grams
PHASE 0 DENSITY	NA		g/mL
PHASE 1 VOLUME (REP 1)	NA		mL
PHASE 1 WEIGHT	NA		Grams
PHASE 1 DENSITY	NA		g/mL

CLP SEMI-VOLATILE EXTRACTION OLM01			
Analyst: C. KING		Analysis Date: 09-SEP-93	
Prep: TOX CHAR LEACHING PROCEDURE (TCLP W/ ORGANICS) SW846-1311		Test: P901.2.0	
Prep: P107.1.0			
Parameter	Result	Det. Limit	Units
INITIAL WEIGHT OR VOLUME	1000		mL
FINAL VOLUME	1.0		mL

PROJECT RECORD

CLP SEMI-VOLATILE ORGANICS OLM01

Analyst: A. BRADBURN

Analysis Date: 14-SEP-93 16:33 Instrument: GC/MS SVOA

Test: 0901.2.0

ep: CLP SEMI-VOLATILE EXTRACTION OLM01 P901.2.0

ep: TOX CHAR LEACHING PROCEDURE (TCLP W/ ORGANICS) SW846-1311 P107.1.0

Parameter	Result	Det. Limit	Units
PHENOL	EST 6	10	ug/L
BIS(2-CHLOROETHYL)ETHER	BDL	10	ug/L
2-CHLOROPHENOL	BDL	10	ug/L
1,3-DICHLOROBENZENE	BDL	10	ug/L
1,4-DICHLOROBENZENE	BDL	10	ug/L
1,2-DICHLOROBENZENE	BDL	10	ug/L
2-METHYLPHENOL	BDL	10	ug/L
BIS(2-CHLOROISOPROPYL)ETHER	BDL	10	ug/L
4-METHYLPHENOL	BDL	10	ug/L
N-NITROSO-DI-N-PROPYLAMINE	BDL	10	ug/L
HEXACHLOROETHANE	BDL	10	ug/L
NITROBENZENE	BDL	10	ug/L
ISOPHORONE	BDL	10	ug/L
2-NITROPHENOL	BDL	10	ug/L
2,4-DIMETHYLPHENOL	BDL	10	ug/L
BIS(2-CHLOROETHOXY)METHANE	BDL	10	ug/L
2,4-DICHLOROPHENOL	BDL	10	ug/L
1,2,4-TRICHLOROBENZENE	BDL	10	ug/L
NAPHTHALENE	BDL	10	ug/L
4-CHLOROANILINE	BDL	10	ug/L
HEXACHLOROBUTADIENE	BDL	10	ug/L
4-CHLORO-3-METHYLPHENOL	BDL	10	ug/L
2-METHYLNAPHTHALENE	BDL	10	ug/L
1,4-DICHLOROCYCLOPENTADIENE	BDL	10	ug/L
1,4,6-TRICHLOROPHENOL	BDL	10	ug/L
2,4,5-TRICHLOROPHENOL	BDL	25	ug/L
2-CHLORONAPHTHALENE	BDL	10	ug/L
2-NITROANILINE	BDL	25	ug/L
DIMETHYLPHTHALATE	BDL	10	ug/L
ACENAPHTHYLENE	BDL	10	ug/L
2,6-DINITROTOLUENE	BDL	10	ug/L
3-NITROANILINE	BDL	25	ug/L
ACENAPHTHENE	BDL	10	ug/L
2,4-DINITROPHENOL	BDL	25	ug/L
4-NITROPHENOL	BDL	25	ug/L
DIBENZOFURAN	BDL	10	ug/L
2,4-DINITROTOLUENE	BDL	10	ug/L
DIETHYLPHTHALATE	BDL	10	ug/L
4-CHLOROPHENYLPHENYLETHER	BDL	10	ug/L
FLUORENE	BDL	10	ug/L
4-NITROANILINE	BDL	25	ug/L
4,6-DINITRO-2-METHYLPHENOL	BDL	25	ug/L
N-NITROSO-DIPHENYLAMINE	BDL	10	ug/L
4-BROMOPHENYLPHENYLETHER	BDL	10	ug/L
HEXACHLOROBENZENE	BDL	10	ug/L
PENTACHLOROPHENOL	BDL	25	ug/L
PHENANTHRENE	BDL	10	ug/L
ANTHRACENE	BDL	10	ug/L
INDOLE	BDL	10	ug/L
N-BUTYLPHTHALATE	BDL	10	ug/L
FLUORANTHRENE	BDL	10	ug/L
PYRENE	BDL	10	ug/L
BENZYL BUTYLPHTHALATE	BDL	10	ug/L

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Parameter	Result	Det. Limit	Units
3,3'-DICHLOROBENZIDINE	BDL	10	ug/L
'Z(A)ANTHRACENE	BDL	10	ug/L
YSENE	BDL	10	ug/L
IS(2-ETHYLHEXYL)PHTHALATE	BDL	10	ug/L
DI-N-OCTYLPHTHALATE	BDL	10	ug/L
BENZO(B)FLUORANTHENE	BDL	10	ug/L
BENZO(K)FLUORANTHENE	BDL	10	ug/L
BENZO(A)PYRENE	BDL	10	ug/L
INDENO(1,2,3-CD)PYRENE	BDL	10	ug/L
DIBENZ(A,H)ANTHRACENE	BDL	10	ug/L
BENZO(G,H,I)PERYLENE	BDL	10	ug/L
PYRIDINE	BDL	50	ug/L
3-METHYLPHENOL (M-CRESOL)	BDL	10	ug/L
SURROGATE RECOVERY			

2-FLUOROPHENOL	81		% Rec
PHENOL-D5	85		% Rec
NITROBENZENE-D5	91		% Rec
2-CHLOROPHENOL-D4	90		% Rec
2-FLUOROBIPHENYL	101		% Rec
2,4,6-TRIBROMOPHENOL	98		% Rec
TERPHENYL-D14	102		% Rec
1,2-DICHLOROBENZENE-D4	66		% Rec

ALSO DETECTED			

3-HYDROXY-2-BUTANONE	EST 33 RT=6.65		ug/L
UNKNOWN	EST 14 RT=6.83		ug/L
UNKNOWN	EST 31 RT=6.9		ug/L
UNKNOWN	EST 85 RT=7.09		ug/L
UNKNOWN ACID	EST 43 RT=7.82		ug/L
UNKNOWN	EST 13 RT=8.11		ug/L
UNKNOWN ACID	EST 13 RT=8.45		ug/L
UNKNOWN	EST 13 RT=8.68		ug/L
UNKNOWN	EST 21 RT=8.84		ug/L
UNKNOWN ACID	EST 28 RT=11.49		ug/L
ACETOPHENONE	EST 26 RT=13.01		ug/L
METHYL ESTER 3-FURANCARBOXYLIC ACID	EST 48 RT=13.23		ug/L
UNKNOWN	EST 19 RT=17.99		ug/L
NONANOIC ACID	EST 16 RT=15.79		ug/L
UNKNOWN	EST 15 RT=18.02		ug/L
UNKNOWN	EST 12 RT=18.11		ug/L
UNKNOWN	EST 20 RT=18.41		ug/L
UNKNOWN	EST 24 RT=19.24		ug/L
UNKNOWN	EST 11 RT=21.52		ug/L
BENZOIC ACID	EST 290 RT=14.76		ug/L

PROJECT RECORD

CLP SEMI-VOLATILE ORGANICS OLMO1			
Analyst: A. BRADBURN		Analysis Date: 15-SEP-93 13:14 Instrument: GC/MS SYOA	
Prep: CLP SEMI-VOLATILE EXTRACTION OLMO1 P901.2.0		Test: 0901.2.1	
Prep: TOX CHAR LEACHING PROCEDURE (CLP W/ ORGANICS) SW846-1311 P107.1.0			
Parameter	Result	Det. Limit	Units
PHENOL	EST 5	10	ug/L
(2-CHLOROETHYL)ETHER	BDL	10	ug/L
2-CHLOROPHENOL	BDL	10	ug/L
1,3-DICHLOROBENZENE	BDL	10	ug/L
1,4-DICHLOROBENZENE	BDL	10	ug/L

Parameter	Result	Det. Limit	Units
1,2-DICHLOROBENZENE	BDL	10	ug/L
1-METHYLPHENOL	BDL	10	ug/L
BIS(2-CHLOROISOPROPYL)ETHER	BDL	10	ug/L
4-METHYLPHENOL	BDL	10	ug/L
N-NITROSO-DI-N-PROPYLAMINE	BDL	10	ug/L
HEXACHLOROETHANE	BDL	10	ug/L
NITROBENZENE	BDL	10	ug/L
ISOPHORONE	BDL	10	ug/L
2-NITROPHENOL	BDL	10	ug/L
2,4-DIMETHYLPHENOL	BDL	10	ug/L
BIS(2-CHLOROETHOXY)METHANE	BDL	10	ug/L
2,4-DICHLOROPHENOL	BDL	10	ug/L
1,2,4-TRICHLOROBENZENE	BDL	10	ug/L
NAPHTHALENE	BDL	10	ug/L
4-CHLOROANILINE	BDL	10	ug/L
HEXACHLOROBUTADIENE	BDL	10	ug/L
4-CHLORO-3-METHYLPHENOL	BDL	10	ug/L
2-METHYLNAPHTHALENE	BDL	10	ug/L
HEXACHLOROCYCLOPENTADIENE	BDL	10	ug/L
2,4,6-TRICHLOROPHENOL	BDL	10	ug/L
2,4,5-TRICHLOROPHENOL	BDL	25	ug/L
2-CHLORONAPHTHALENE	BDL	10	ug/L
2-NITROANILINE	BDL	25	ug/L
DIMETHYLPHTHALATE	BDL	10	ug/L
ACENAPHTHYLENE	BDL	10	ug/L
2,6-DINITROTOLUENE	BDL	10	ug/L
3-NITROANILINE	BDL	25	ug/L
1-NAPHTHENE	BDL	10	ug/L
2,4-DINITROPHENOL	BDL	25	ug/L
4-NITROPHENOL	BDL	25	ug/L
DIBENZOFURAN	BDL	10	ug/L
2,4-DINITROTOLUENE	BDL	10	ug/L
DIETHYLPHTHALATE	BDL	10	ug/L
4-CHLOROPHENYLPHENYLETHER	BDL	10	ug/L
FLUORENE	BDL	10	ug/L
4-NITROANILINE	BDL	25	ug/L
4,6-DINITRO-2-METHYLPHENOL	BDL	25	ug/L
N-NITROSO-DIPHENYLAMINE	BDL	10	ug/L
4-BROMOPHENYLPHENYLETHER	BDL	10	ug/L
HEXACHLOROBENZENE	BDL	10	ug/L
PENTACHLOROPHENOL	BDL	25	ug/L
PHENANTHRENE	BDL	10	ug/L
ANTHRACENE	BDL	10	ug/L
CARBAZOLE	BDL	10	ug/L
DI-N-BUTYLPHTHALATE	BDL	10	ug/L
FLOURANTHENE	BDL	10	ug/L
PYRENE	BDL	10	ug/L
BENZYL BUTYL PHTHALATE	BDL	10	ug/L
3,3'-DICHLOROBENZIDINE	BDL	10	ug/L
BENZ(A)ANTHRACENE	BDL	10	ug/L
CHRYSENE	BDL	10	ug/L
BIS(2-ETHYLHEXYL)PHTHALATE	BDL	10	ug/L
N-OCTYLPHTHALATE	BDL	10	ug/L
BENZO(B)FLUORANTHENE	BDL	10	ug/L
BENZO(K)FLUORANTHENE	BDL	10	ug/L
BENZO(A)PYRENE	BDL	10	ug/L
INDENO(1,2,3-CD)PYRENE	BDL	10	ug/L

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Parameter	Result	Det. Limit	Units
1,2-BENZ(A,H)ANTHRACENE	BDL	10	ug/L
1,2,6,7-TETRABENZ(A,H,I)PERYLENE	BDL	10	ug/L
PROXIMATE RECOVERY	BDL		

2-FLUOROPHENOL	10		% Rec
PHENOL-D5	44		% Rec
NITROBENZENE-D5	54		% Rec
2-CHLOROPHENOL-D4	43		% Rec
2-FLUOROBIPHENYL	80		% Rec
2,4,6-TRIBROMOPHENOL	107		% Rec
TERPHENYL-D14	137		% Rec
1,2-DICHLOROBENZENE-D4	54		% Rec

FAA OR ICP ACID DIGESTION OF AQUEOUS SAMPLES (CLP) ILM01			
Analyst: E. MERRILL		Analysis Date: 09-SEP-93	
Prep: TOX CHAR LEACHING PROCEDURE (TCLP W/ ORGANICS) SUB46-1311 P107.1.0		Test: P930.4.0	
Parameter	Result	Det. Limit	Units
INITIAL WEIGHT OR VOLUME	50		mL
FINAL WEIGHT OR VOLUME	50		mL

GFAA ACID DIGESTION OF AQUEOUS SAMPLES (CLP) ILM01			
Analyst: C. COFFEY		Analysis Date: 09-SEP-93	
Prep: TOX CHAR LEACHING PROCEDURE (TCLP W/ ORGANICS) SUB46-1311 P107.1.0		Test: P930.6.0	
Parameter	Result	Det. Limit	Units
INITIAL WEIGHT OR VOLUME	50		mL
FINAL WEIGHT OR VOLUME	50		mL

MERCURY CVAA ACID DIGESTION OF AQUEOUS SAMPLES (CLP) ILM01			
Analyst: R. BYERS		Analysis Date: 09-SEP-93	
Prep: TOX CHAR LEACHING PROCEDURE (TCLP W/ ORGANICS) SUB46-1311 P107.1.0		Test: P931.6.0	
Parameter	Result	Det. Limit	Units
INITIAL WEIGHT OR VOLUME	100		mL
FINAL VOLUME	100		mL

ANTIMONY ICP (CLP) ILM01			
Analyst: N. JAO		Analysis Date: 10-SEP-93 08:00 Instrument: ICP	
Prep: FAA OR ICP ACID DIGESTION OF AQUEOUS SAMPLES (CLP) ILM01 P930.4.0		Test: M902.3.0	
Prep: TOX CHAR LEACHING PROCEDURE (TCLP W/ ORGANICS) SUB46-1311 P107.1.0			
Parameter	Result	Det. Limit	Units
ANTIMONY	BDL	0.030	mg/L

ARSENIC GFAA (CLP) ILM01			
Analyst: A. ROBERTSON		Analysis Date: 10-SEP-93 Instrument: GFAA	
Prep: GFAA ACID DIGESTION OF AQUEOUS SAMPLES (CLP) ILM01 P930.6.0		Test: M903.2.0	
Prep: TOX CHAR LEACHING PROCEDURE (TCLP W/ ORGANICS) SUB46-1311 P107.1.0			
Parameter	Result	Det. Limit	Units
ARSENIC	BDL	0.020	mg/L
1:4 DILUTION			

BARIUM ICP (CLP) ILM01			
Analyst: N. JAO		Analysis Date: 10-SEP-93 08:00 Instrument: ICP	
Prep: FAA OR ICP ACID DIGESTION OF AQUEOUS SAMPLES (CLP) ILM01 P930.4.0		Test: M904.3.0	
Prep: TOX CHAR LEACHING PROCEDURE (TCLP W/ ORGANICS) SUB46-1311 P107.1.0			
Parameter	Result	Det. Limit	Units
BARIUM	1.3	0.010	mg/L

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BERYLLIUM ICP (CLP) ILM01			
Analyst: M. JAO		Analysis Date: 13-SEP-93 08:00 Instrument: ICP	
Prep: FAA OR ICP ACID DIGESTION OF AQUEOUS SAMPLES (CLP) ILM01 P930.4.0		Test: M905.3.0	
Prep: TOX CHAR LEACHING PROCEDURE (TCLP W/ ORGANICS) SW846-1311 P107.1.0			

Parameter	Result	Det. Limit	Units
BERYLLIUM	BDL	0.0050	mg/L

CADMIUM ICP (CLP) ILM01			
Analyst: M. JAO		Analysis Date: 10-SEP-93 08:00 Instrument: ICP	
Prep: FAA OR ICP ACID DIGESTION OF AQUEOUS SAMPLES (CLP) ILM01 P930.4.0		Test: M908.3.0	
Prep: TOX CHAR LEACHING PROCEDURE (TCLP W/ ORGANICS) SW846-1311 P107.1.0			

Parameter	Result	Det. Limit	Units
CADMIUM	0.027	0.0050	mg/L

HEXAVALENT CHROMIUM SW846-7196A			
Analyst: S. PFEFFER		Analysis Date: 15-SEP-93	
Prep: TOX CHAR LEACHING PROCEDURE (TCLP W/ ORGANICS) SW846-1311 P107.1.0		Test: M110.6.0	

Parameter	Result	Det. Limit	Units
HEXAVALENT CHROMIUM	BDL	0.01	mg/L

Observed low spike recovery. Spike analyzed twice.

CHROMIUM ICP (CLP) ILM01			
Analyst: M. JAO		Analysis Date: 10-SEP-93 08:00 Instrument: ICP	
Prep: FAA OR ICP ACID DIGESTION OF AQUEOUS SAMPLES (CLP) ILM01 P930.4.0		Test: M910.3.0	
Prep: TOX CHAR LEACHING PROCEDURE (TCLP W/ ORGANICS) SW846-1311 P107.1.0			

Parameter	Result	Det. Limit	Units
CHROMIUM	BDL	0.010	mg/L

LEAD GFAA (CLP) ILM01			
Analyst: J. WALLACE		Analysis Date: 10-SEP-93 Instrument: GFAA	
Prep: GFAA ACID DIGESTION OF AQUEOUS SAMPLES (CLP) ILM01 P930.6.0		Test: M916.2.0	
Prep: TOX CHAR LEACHING PROCEDURE (TCLP W/ ORGANICS) SW846-1311 P107.1.0			

Parameter	Result	Det. Limit	Units
LEAD	0.032	0.0060	mg/L

1:2 DILUTION

MANGANESE ICP (CLP) ILM01			
Analyst: M. JAO		Analysis Date: 10-SEP-93 08:00 Instrument: ICP	
Prep: FAA OR ICP ACID DIGESTION OF AQUEOUS SAMPLES (CLP) ILM01 P930.4.0		Test: M919.3.0	
Prep: TOX CHAR LEACHING PROCEDURE (TCLP W/ ORGANICS) SW846-1311 P107.1.0			

Parameter	Result	Det. Limit	Units
MANGANESE	0.56	0.010	mg/L

MERCURY CVAA (CLP) ILM01			
Analyst: G. MAPP		Analysis Date: 10-SEP-93 Instrument: CVAA	
Prep: MERCURY CVAA ACID DIGESTION OF AQUEOUS SAMPLES (CLP) ILM01 P931.6.0		Test: M920.2.0	
Prep: TOX CHAR LEACHING PROCEDURE (TCLP W/ ORGANICS) SW846-1311 P107.1.0			

Parameter	Result	Det. Limit	Units
MERCURY	BDL	0.00050	mg/L

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NICKEL ICP (CLP) ILM01

Analyst: M. JAO Analysis Date: 10-SEP-93 08:00 Instrument: ICP Test: M922.3.0
 Prep: FAA OR ICP ACID DIGESTION OF AQUEOUS SAMPLES (CLP) ILM01 P930.4.0
 Prep: TOX CHAR LEACHING PROCEDURE (TCLP W/ ORGANICS) SW846-1311 P107.1.0

Parameter	Result	Det. Limit	Units
NICKEL	0.031	0.010	mg/L

TIN ICP SW846-6010A

Analyst: M. JAO Analysis Date: 10-SEP-93 08:00 Instrument: ICP Test: M135.3.0
 Prep: FAA OR ICP ACID DIGESTION OF AQUEOUS SAMPLES (CLP) ILM01 P930.4.0
 Prep: TOX CHAR LEACHING PROCEDURE (TCLP W/ ORGANICS) SW846-1311 P107.1.0

Parameter	Result	Det. Limit	Units
TIN	BDL	0.050	mg/L

SILVER ICP (CLP) ILM01

Analyst: M. JAO Analysis Date: 10-SEP-93 08:00 Instrument: ICP Test: M930.3.0
 Prep: FAA OR ICP ACID DIGESTION OF AQUEOUS SAMPLES (CLP) ILM01 P930.4.0
 Prep: TOX CHAR LEACHING PROCEDURE (TCLP W/ ORGANICS) SW846-1311 P107.1.0

Parameter	Result	Det. Limit	Units
SILVER	BDL	0.010	mg/L

SELENIUM GFAA (CLP) ILM01

Analyst: M. BAUER Analysis Date: 13-SEP-93 Instrument: GFAA Test: M928.2.0
 Prep: GFAA ACID DIGESTION OF AQUEOUS SAMPLES (CLP) ILM01 P930.6.0
 Prep: TOX CHAR LEACHING PROCEDURE (TCLP W/ ORGANICS) SW846-1311 P107.1.0

Parameter	Result	Det. Limit	Units
SELENIUM	BDL	0.0050	mg/L

VANADIUM ICP (CLP) ILM01

Analyst: M. JAO Analysis Date: 10-SEP-93 08:00 Instrument: ICP Test: M938.3.0
 Prep: FAA OR ICP ACID DIGESTION OF AQUEOUS SAMPLES (CLP) ILM01 P930.4.0
 Prep: TOX CHAR LEACHING PROCEDURE (TCLP W/ ORGANICS) SW846-1311 P107.1.0

Parameter	Result	Det. Limit	Units
VANADIUM	BDL	0.010	mg/L

ZINC ICP (CLP) ILM01

Analyst: M. JAO Analysis Date: 10-SEP-93 08:00 Instrument: ICP Test: M939.3.0
 Prep: FAA OR ICP ACID DIGESTION OF AQUEOUS SAMPLES (CLP) ILM01 P930.4.0
 Prep: TOX CHAR LEACHING PROCEDURE (TCLP W/ ORGANICS) SW846-1311 P107.1.0

Parameter	Result	Det. Limit	Units
ZINC	4.4	0.020	mg/L

NEUTRAL WATER LEACHING METHOD (SW846-1310 MODIFIED) SW846-1310(MOD)

Analyst: S. HAHN Analysis Date: 08-SEP-93 Test: P105.1.0

Parameter	Result	Det. Limit	Units
TOTAL SAMPLE WEIGHT	100		Grams
LIQUID FRACTION (GRAMS)	NA		Grams
EXTRACTED SAMPLE	100		Grams
SOLIDS	100		Percent
9.5 MM SIEVE TEST			Passed
INITIAL PH	6.21		Std. Units
FINAL PH	6.24		Std. Units
INITIAL DI ADDED	1600		mL
FINAL DI ADDED	2000		mL
NORMAL ACID ADDED	NA		mL
EXTRACT VOLUME LIQUID (ADD BACK)	NA		mL
TOTAL VOLUME FILTRATE	2000		mL
INITIAL TIME	10104.4		Hours

PROJECT RECORD

Parameter	Result	Det. Limit	Units
FINAL TIME	10128.3		Hours

CYANIDE DISTILLATION (CLP) ILM01			
Analyst: J. STOKES	Analysis Date: 10-SEP-93	Test: P901.4.0	
Prep: NEUTRAL WATER LEACHING METHOD (SW846-1310 MODIFIED) SW846-1310(MOD) P105.1.0			

Parameter	Result	Det. Limit	Units
INITIAL WEIGHT OR VOLUME	500		mL
FINAL VOLUME	250		mL

CYANIDE, TOTAL (AUTOMATED) (CLP) ILM01			
Analyst: J. WILDER	Analysis Date: 10-SEP-93	Instrument: AUTO-ANALYZER	Test: G901.4.0
Prep: CYANIDE DISTILLATION (CLP) ILM01 P901.4.0			
Prep: NEUTRAL WATER LEACHING METHOD (SW846-1310 MODIFIED) SW846-1310(MOD) P105.1.0			

Parameter	Result	Det. Limit	Units
CYANIDE	BDL	0.005	mg/L

Sample Comments

ADDITIONAL SAMPLE WAS RECEIVED INTO THE LABORATORY ON 09/07/93. IT WAS SAMPLED ON 09/07/93 AT 10:30AM. DCE
 THIS IS A MODIFIED REPORT. REPORT RE-ISSUED TO INCLUDE PYRIDINE AND 3-METHYLPHENOL. (BOTH NON-DETECTED IN SEMIVOLATILE ANALYSIS) CCB 10/12/93

BDL Below Detection Limit
 EST Estimated Value
 NA Not Applicable
 RT Retention Time

Sample chain of custody number 14513.

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PROJECT RECORD

Quality Assurance Officer: JL Busch

C E R T I F I C A T E O F A N A L Y S I S

Service Location HERITAGE LABORATORIES, INC. 901 W. MORRIS ST. INDIANAPOLIS, IN 46231 (317)243-8305	Received	Project	Lab ID
	27-SEP-93	2471	A291098
	Complete	PO Number	
	12-OCT-93	92005 *	
	Printed	Sampled	
	13-OCT-93	07-SEP-93	

Report To	Bill To
JIM FIFE AWD TECHNOLOGIES, INC. 3553 FOUNDERS RD C/O RESIDENCE INN INDIANAPOLIS, IN 46268	ACCOUNTS PAYABLE AWD TECHNOLOGIES, INC. BUILDING 3, SUITE 300 PENN CENTER WEST PITTSBURGH, PA 15276

DESCRIPTION: ECC-04A1-PBM-03
 LOCATION: ECC - ZIONSVILLE

Sample Description **PROJECT RECORD**

TOTAL AVAILABLE SULFIDE EXTRACTION SW 7.3.4.1			
Analyst: L. WILSON	Analysis Date: 28-SEP-93	Test: P116.2.0	
Parameter	Result	Det. Limit	Units
INITIAL WEIGHT OR VOLUME	10		Grams
FINAL VOLUME	100		mL

SULFIDE SW846-9030A			
Analyst: L. WILSON	Analysis Date: 28-SEP-93	Test: G110.4.0	
Prep: TOTAL AVAILABLE SULFIDE EXTRACTION SW 7.3.4.1 P116.2.0			
Parameter	Result	Det. Limit	Units
SULFIDE	BDL	10	mg/kg

PCB SONICATION EXTRACTION SW846-3550			
Analyst: J. ISENBERG	Analysis Date: 27-SEP-93	Test: P231.1.0	
Parameter	Result	Det. Limit	Units
INITIAL WEIGHT OR VOLUME	9.76		Grams
FINAL VOLUME	100		mL

POLYCHLORINATED BIPHENYLS (PCBS) SW846-8080			
Analyst: L. WILLIAMS	Analysis Date: 28-SEP-93	Instrument: GC/ECD	Test: O301.2.0
Prep: PCB SONICATION EXTRACTION SW846-3550 P231.1.0			
Parameter	Result	Det. Limit	Units
PCB AROCHLOR 1016	BDL	1.0	mg/kg
PCB AROCHLOR 1221	BDL	5.0	mg/kg
PCB AROCHLOR 1232	BDL	1.0	mg/kg
PCB AROCHLOR 1242	BDL	1.0	mg/kg
PCB AROCHLOR 1248	BDL	1.0	mg/kg
PCB AROCHLOR 1254	BDL	1.0	mg/kg
PCB AROCHLOR 1260	BDL	1.0	mg/kg
PCB AROCHLOR 1262	BDL	1.0	mg/kg

Sample Comments

SAMPLE WAS ORIGINALLY RECEIVED INTO THE LABORATORY ON 08/31/93.

BDL Below Detection Limit

Sample Comments

*This Certificate shall not be reproduced, except in full,
without the written approval of the lab.*

PROJECT RECORD

Quality Assurance Officer: _____



C E R T I F I C A T E O F A N A L Y S I S

Service Location HERITAGE LABORATORIES, INC. 901 W. MORRIS ST. INDIANAPOLIS, IN 46231 (317)243-8305	Received	Project	Lab ID
	31-AUG-93	2471	A288945
	Complete	PO Number	
	17-SEP-93	92005 *	
	Printed	Sampled	
	12-OCT-93	31-AUG-93 14:15	

Report To	Bill To
JIM FIFE AWD TECHNOLOGIES, INC. 3553 FOUNDERS RD C/O RESIDENCE INN INDIANAPOLIS, IN 46268	ACCOUNTS PAYABLE AWD TECHNOLOGIES, INC. BUILDING 3, SUITE 300 PENN CENTER WEST PITTSBURGH, PA 15276

SAMPLE I.D.: ECC-04A1-PBM-04 DESCRIPTION: WOOD LOCATION: ECC -ZIONSVILLE	Sample Description: PROJECT RECORD
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ZERO HEADSPACE EXTRACTION (TCLP) SW846-1311			
Analyst: G. WILSON	Analysis Date: 03-SEP-93	Test: P108.1.0	
Parameter	Result	Det. Limit	Units
TOTAL SAMPLE WEIGHT	25.0		Grams
LIQUID FRACTION (GRAMS)	NA		Grams
LIQUID PORTION	NA		mL
EXTRACTED SAMPLE	25.0		Grams
PHASE ONE VOLUME (REP 0)	423.5		mL
PHASE TWO VOLUME (REP 1)	NA		mL

CLP VOLATILE ORGANICS OLMO1			
Analyst: G. WILSON	Analysis Date: 07-SEP-93 10:56	Instrument: GC/MS VOA	Test: 0902.2.0
Prep: ZERO HEADSPACE EXTRACTION (TCLP) SW846-1311 P108.1.0			
Parameter	Result	Det. Limit	Units
CHLOROMETHANE	BDL	100	ug/L
BROMOMETHANE	BDL	100	ug/L
VINYL CHLORIDE	BDL	100	ug/L
CHLOROETHANE	BDL	100	ug/L
METHYLENE CHLORIDE	BDL	100	ug/L
ACETONE	BDL	100	ug/L
CARBON DISULFIDE	BDL	100	ug/L
1,1-DICHLOROETHENE	BDL	100	ug/L
1,1-DICHLOROETHANE	BDL	100	ug/L
1,2-DICHLOROETHENE (TOTAL)	BDL	100	ug/L
CHLOROFORM	BDL	100	ug/L
1,2-DICHLOROETHANE	BDL	100	ug/L
2-BUTANONE	BDL	100	ug/L
1,1,1-TRICHLOROETHANE	BDL	100	ug/L
CARBON TETRACHLORIDE	BDL	100	ug/L
BROMODICHLOROMETHANE	BDL	100	ug/L
1,2-DICHLOROPROPANE	BDL	100	ug/L
1,3-DICHLOROPROPENE	BDL	100	ug/L
1,1-DICHLOROETHANE	BDL	100	ug/L
1,1,2-TRICHLOROETHANE	BDL	100	ug/L
BENZENE	BDL	100	ug/L

Parameter	Result	Det. Limit	Units
TRANS-1,3-DICHLOROPROPENE	BDL	100	ug/L
FORMALDEHYDE	BDL	100	ug/L
METHYL-2-PENTANONE	BDL	100	ug/L
2-HEXANONE	BDL	100	ug/L
TETRACHLOROETHENE	BDL	100	ug/L
TOLUENE	BDL	100	ug/L
1,1,2,2-TETRACHLOROETHANE	BDL	100	ug/L
CHLOROBENZENE	BDL	100	ug/L
ETHYLBENZENE	BDL	100	ug/L
STYRENE	BDL	100	ug/L
XYLENE (TOTAL)	BDL	100	ug/L
SURROGATE RECOVERY			

DICHLOROETHANE-D4	109		% Rec
TOLUENE-D8	97		% Rec
BROMOFLUOROBENZENE	101		% Rec
1:10 DILUTION.			

TOX CHAR LEACHING PROCEDURE (TCLP W/ ORGANICS) SW846-1311			
Analyst: S. CARDWELL		Analysis Date: 03-SEP-93	
		Test: P107.1.0	
Parameter	Result	Det. Limit	Units
TOTAL SAMPLE WEIGHT	100		Grams
LIQUID FRACTION (GRAMS)	NA		Grams
EXTRACTED SAMPLE	100		Grams
SOLIDS	100		Percent
75 MM SIEVE TEST			Passed
INITIAL PH	3.91		Std. Units
ADJUSTED PH	NA		Std. Units
BUFFER SOLUTION PH	4.93		Std. Units
FINAL PH	4.88		Std. Units
VOLUME BUFFERED SOLUTION	2000		mL
VOLUME EXTRACT FILTERED	2000		mL
LIQUID FRACTION	0		mL
TOTAL VOLUME FILTRATE	2000		mL
AMBIENT TEMPERATURE	23		Degrees C
INITIAL TIME	8050.9		HRS
FINAL TIME	8068.9		HRS
PHASE 0 VOLUME (REP 0)	NA		mL
PHASE 0 WEIGHT	NA		Grams
PHASE 0 DENSITY	NA		g/mL
PHASE 1 VOLUME (REP 1)	NA		mL
PHASE 1 WEIGHT	NA		Grams
PHASE 1 DENSITY	NA		g/mL

CLP SEMI-VOLATILE EXTRACTION OLMO1			
Analyst: C. KING		Analysis Date: 09-SEP-93	
Prep: TOX CHAR LEACHING PROCEDURE (TCLP W/ ORGANICS) SW846-1311		P107.1.0	
		Test: P901.2.0	
Parameter	Result	Det. Limit	Units
INITIAL WEIGHT OR VOLUME	1000		mL
FINAL VOLUME	1.0		mL

PROJECT RECORD

Parameter	Result	Det. Limit	Units
2,3'-DICHLOROBENZIDINE	BDL	10	ug/L
Z(A)ANTHRACENE	BDL	10	ug/L
BIYSENE	BDL	10	ug/L
BIS(2-ETHYLHEXYL)PHTHALATE	BDL	10	ug/L
DI-N-OCTYL PHTHALATE	BDL	10	ug/L
BENZO(B) FLUORANTHENE	BDL	10	ug/L
BENZO(K) FLUORANTHENE	BDL	10	ug/L
BENZO(A) PYRENE	BDL	10	ug/L
INDENO(1,2,3-CD) PYRENE	BDL	10	ug/L
DIBENZ(A,H)ANTHRACENE	BDL	10	ug/L
BENZO(G,H,I)PERYLENE	BDL	50	ug/L
PYRIDINE	BDL	10	ug/L
3-METHYLPHENOL (M-CRESOL)			
SURROGATE RECOVERY			

2-FLUOROPHENOL	76		% Rec
PHENOL-D5	48		% Rec
NITROBENZENE-D5	55		% Rec
2-CHLOROPHENOL-D4	70		% Rec
2-FLUOROBIPHENYL	89		% Rec
2,4,6-TRIBROMOPHENOL	95		% Rec
TERPHENYL-D14	64		% Rec
1,2-DICHLOROBENZENE-D4	67		% Rec

ALSO DETECTED			

METHYLETHYL ESTER PROPANOIC ACID	EST 67 RT=6.92		ug/L
ETHYLPROPANOIC ACID	EST 10 RT=7.3		ug/L
BUTANOIC ACID	EST 31 RT=7.74		ug/L
1-METHYLETHYL ESTER BUTANOIC ACID	EST 11 RT=7.87		ug/L
UNKNOWM ACID	EST 8 RT=8.46		ug/L
UNKNOWM ACID	EST 20 RT=8.54		ug/L
UNKNOWM	EST 12 RT=8.74		ug/L
UNKNOWM KETONE	EST 7 RT=10.51		ug/L
UNKNOWM	EST 11 RT=11.53		ug/L
UNKNOWM	EST 10 RT=13.2		ug/L
UNKNOWM	EST 13 RT=16.67		ug/L
UNKNOWM	EST 12 RT=16.88		ug/L
UNKNOWM	EST 7 RT=17.27		ug/L
UNKNOWM	EST 62 RT=17.45		ug/L
4-HYDROXY-3-METHOXY-BENZALDEHYDE	EST 8 RT=17.65		ug/L
2,5-DIMETHOXY-3,6-DI...2,5-CYCLOHEXADIENE-1,4-DIO	EST 10 RT=17.99		ug/L
UNKNOWM	EST 10 RT=18.07		ug/L
UNKNOWM	EST 7 RT=19.68		ug/L
UNKNOWM	EST 9 RT=19.76		ug/L
8-HYDROXY-6-METHOXY-3-METHYL-1H-2-BENZOPYRAN-1-0	EST 13 RT=22.52		ug/L
UNKNOWM	EST 10 RT=22.88		ug/L

PROJECT RECORD

CLP SEMI-VOLATILE ORGANICS OLMOI
 Analyt: A. BRADSHAW Analyze date: 15-SEP-93 14:55 Instrument: GC/MS SVDA Test: 0901.2.1
 Prep: CLP SEMI-VOLATILE EXTRACTION OLMOI P901.2.0
 Prep: TOX CHA LEACHING PROCEDURE (TCLE V/ ORGANICS) SUB46-1311 P107.1.0

Parameter	Result	Det. Limit	Units
.C.NOL	BDL	10	ug/L
BIS(2-CHLOROETHYL)ETHER	BDL	10	ug/L
2-CHLOROPHENOL	BDL	10	ug/L
1,3-DICHLOROENZENE	BDL	10	ug/L

Parameter	Result	Det. Limit	Units
1,4-DICHLOROBENZENE	BDL	10	ug/L
2-DICHLOROBENZENE	BDL	10	ug/L
METHYLPHENOL	BDL	10	ug/L
BIS(2-CHLOROISOPROPYL)ETHER	BDL	10	ug/L
4-METHYLPHENOL	BDL	10	ug/L
N-NITROSO-DI-N-PROPYLAMINE	BDL	10	ug/L
HEXACHLOROETHANE	BDL	10	ug/L
NITROBENZENE	BDL	10	ug/L
ISOPHORONE	BDL	10	ug/L
2-NITROPHENOL	BDL	10	ug/L
2,4-DIMETHYLPHENOL	BDL	10	ug/L
BIS(2-CHLOROETHOXY)METHANE	BDL	10	ug/L
2,4-DICHLOROPHENOL	BDL	10	ug/L
1,2,4-TRICHLOROBENZENE	BDL	10	ug/L
NAPHTHALENE	BDL	10	ug/L
4-CHLOROANILINE	BDL	10	ug/L
HEXACHLOROBUTADIENE	BDL	10	ug/L
4-CHLORO-3-METHYLPHENOL	BDL	10	ug/L
2-METHYLNAPHTHALENE	BDL	10	ug/L
HEXACHLOROCYCLOPENTADIENE	BDL	10	ug/L
2,4,6-TRICHLOROPHENOL	BDL	10	ug/L
2,4,5-TRICHLOROPHENOL	BDL	25	ug/L
2-CHLORONAPHTHALENE	BDL	10	ug/L
2-NITROANILINE	BDL	25	ug/L
DIMETHYLPHTHALATE	BDL	10	ug/L
ACENAPHTHYLENE	BDL	10	ug/L
1,6-DINITROTOLUENE	BDL	10	ug/L
3-NITROANILINE	BDL	25	ug/L
ACENAPHTHENE	BDL	10	ug/L
2,4-DINITROPHENOL	BDL	25	ug/L
4-NITROPHENOL	BDL	25	ug/L
DIBENZOFURAN	BDL	10	ug/L
2,4-DINITROTOLUENE	BDL	10	ug/L
DIETHYLPHTHALATE	BDL	10	ug/L
4-CHLOROPHENYLPHENYLETHER	BDL	10	ug/L
FLUORENE	BDL	10	ug/L
4-NITROANILINE	BDL	25	ug/L
4,6-DINITRO-2-METHYLPHENOL	BDL	25	ug/L
N-NITROSO-DIPHENYLAMINE	BDL	10	ug/L
4-BROMOPHENYLPHENYLETHER	BDL	10	ug/L
HEXACHLOROBENZENE	BDL	10	ug/L
PENTACHLOROPHENOL	BDL	25	ug/L
PHENANTHRENE	BDL	10	ug/L
ANTHRACENE	BDL	10	ug/L
CARBAZOLE	BDL	10	ug/L
DI-N-BUTYLPHTHALATE	BDL	10	ug/L
FLOURANTHENE	BDL	10	ug/L
PYRENE	BDL	10	ug/L
BENZYL BUTYLPHTHALATE	BDL	10	ug/L
3,3'-DICHLOROBENZIDINE	BDL	10	ug/L
BENZ(A)ANTHRACENE	BDL	10	ug/L
CHRYSENE	BDL	10	ug/L
1,5-DI(2-ETHYLHEXYL)PHTHALATE	BDL	10	ug/L
1,8-DI(2-N-OCTYL)PHTHALATE	BDL	10	ug/L
BENZO(B)FLUORANTHENE	BDL	10	ug/L
BENZO(K)FLUORANTHENE	BDL	10	ug/L
BENZO(A)PYRENE	BDL	10	ug/L

PROJECT RECORD

Parameter	Result	Det. Limit	Units
INDENO(1,2,3-CD)PYRENE	BDL	10	ug/L
ENZ(A,H)ANTHRACENE	BDL	10	ug/L
BENZO(G,H,I)PERYLENE	BDL	10	ug/L
SURROGATE RECOVERY	BDL		

2-FLUOROPHENOL	23		% Rec
PHENOL-D5	50		% Rec
NITROBENZENE-D5	58		% Rec
2-CHLOROPHENOL-D4	51		% Rec
2-FLUOROBIPHENYL	87		% Rec
2,4,6-TRIBROMOPHENOL	86		% Rec
TERPHENYL-D14	68		% Rec
1,2-DICHLOROBENZENE-D4	61		% Rec

FAA OR ICP ACID DIGESTION OF AQUEOUS SAMPLES (CLP) ILM01

Analyst: S. CARDWELL Analysis Date: 04-SEP-93 Test: P930.4.0
 Prep: TOX CHAR LEACHING PROCEDURE (TCLP W/ ORGANICS) SW846-1311 P107.1.0

Parameter	Result	Det. Limit	Units
INITIAL WEIGHT OR VOLUME	50		mL
FINAL WEIGHT OR VOLUME	50		mL

FAA OR ICP ACID DIGESTION OF AQUEOUS SAMPLES (CLP) ILM01

Analyst: E. HERRILL Analysis Date: 09-SEP-93 Test: P930.4.1
 Prep: TOX CHAR LEACHING PROCEDURE (TCLP W/ ORGANICS) SW846-1311 P107.1.0

Parameter	Result	Det. Limit	Units
INITIAL WEIGHT OR VOLUME	50		mL
FINAL WEIGHT OR VOLUME	50		mL

FAA ACID DIGESTION OF AQUEOUS SAMPLES (CLP) ILM01

Analyst: S. CARDWELL Analysis Date: 04-SEP-93 Test: P930.6.0
 Prep: TOX CHAR LEACHING PROCEDURE (TCLP W/ ORGANICS) SW846-1311 P107.1.0

Parameter	Result	Det. Limit	Units
INITIAL WEIGHT OR VOLUME	50		mL
FINAL WEIGHT OR VOLUME	50		mL

GFAA ACID DIGESTION OF AQUEOUS SAMPLES (CLP) ILM01

Analyst: C. COFFEY Analysis Date: 09-SEP-93 Test: P930.6.1
 Prep: TOX CHAR LEACHING PROCEDURE (TCLP W/ ORGANICS) SW846-1311 P107.1.0

Parameter	Result	Det. Limit	Units
INITIAL WEIGHT OR VOLUME	50		mL
FINAL WEIGHT OR VOLUME	50		mL

MERCURY CVAA ACID DIGESTION OF AQUEOUS SAMPLES (CLP) ILM01

Analyst: R. BYERS Analysis Date: 09-SEP-93 Test: P931.6.0
 Prep: TOX CHAR LEACHING PROCEDURE (TCLP W/ ORGANICS) SW846-1311 P107.1.0

Parameter	Result	Det. Limit	Units
INITIAL WEIGHT OR VOLUME	100		mL
FINAL VOLUME	100		mL

ANTIMONY ICP (CLP) ILM01

Analyst: M. JAO Analysis Date: 07-SEP-93 08:00 Instrument: ICP Test: M902.3.0
 Prep: FAA OR ICP ACID DIGESTION OF AQUEOUS SAMPLES (CLP) ILM01 P930.4.0
 sp: TOX CHAR LEACHING PROCEDURE (TCLP W/ ORGANICS) SW846-1311 P107.1.0

Parameter	Result	Det. Limit	Units
ANTIMONY	BDL	0.030	mg/L

PROJECT RECORD

ARSENIC GFAA (CLP) ILM01

Analyst: A. ROBERTSON Analysis Date: 07-SEP-93 Instrument: GFAA Test: M903.2.0
 Prep: GFAA ACID DIGESTION OF AQUEOUS SAMPLES (CLP) ILM01 P930.6.0
 Prep: TOX CHAR LEACHING PROCEDURE (TCLP W/ ORGANICS) SW846-1311 P107.1.0

Parameter	Result	Det. Limit	Units
ARSENIC	0.029	0.0020	mg/L

BARIUM ICP (CLP) ILM01

Analyst: N. JAO Analysis Date: 07-SEP-93 08:00 Instrument: ICP Test: M904.3.0
 Prep: FAA OR ICP ACID DIGESTION OF AQUEOUS SAMPLES (CLP) ILM01 P930.4.0
 Prep: TOX CHAR LEACHING PROCEDURE (TCLP W/ ORGANICS) SW846-1311 P107.1.0

Parameter	Result	Det. Limit	Units
BARIUM	3.9	0.010	mg/L

BERYLLIUM ICP (CLP) ILM01

Analyst: N. JAO Analysis Date: 07-SEP-93 08:00 Instrument: ICP Test: M905.3.0
 Prep: FAA OR ICP ACID DIGESTION OF AQUEOUS SAMPLES (CLP) ILM01 P930.4.0
 Prep: TOX CHAR LEACHING PROCEDURE (TCLP W/ ORGANICS) SW846-1311 P107.1.0

Parameter	Result	Det. Limit	Units
BERYLLIUM	BDL	0.0050	mg/L

CADMIUM ICP (CLP) ILM01

Analyst: N. JAO Analysis Date: 07-SEP-93 08:00 Instrument: ICP Test: M908.3.0
 Prep: FAA OR ICP ACID DIGESTION OF AQUEOUS SAMPLES (CLP) ILM01 P930.4.0
 Prep: TOX CHAR LEACHING PROCEDURE (TCLP W/ ORGANICS) SW846-1311 P107.1.0

Parameter	Result	Det. Limit	Units
CADMIUM	BDL	0.0050	mg/L

HEXAVALENT CHROMIUM SW846-7196A

Analyst: S. PFEFFER Analysis Date: 07-SEP-93 Test: M110.6.0
 Prep: TOX CHAR LEACHING PROCEDURE (TCLP W/ ORGANICS) SW846-1311 P107.1.0

Parameter	Result	Det. Limit	Units
HEXAVALENT CHROMIUM	BDL	0.05	mg/L

1:5 dilution due to color interference.

CHROMIUM ICP (CLP) ILM01

Analyst: N. JAO Analysis Date: 10-SEP-93 08:00 Instrument: ICP Test: M910.3.0
 Prep: FAA OR ICP ACID DIGESTION OF AQUEOUS SAMPLES (CLP) ILM01 P930.4.1
 Prep: TOX CHAR LEACHING PROCEDURE (TCLP W/ ORGANICS) SW846-1311 P107.1.0

Parameter	Result	Det. Limit	Units
CHROMIUM	0.011	0.010	mg/L

LEAD GFAA (CLP) ILM01

Analyst: J. WALLACE Analysis Date: 10-SEP-93 Instrument: GFAA Test: M916.2.0
 Prep: GFAA ACID DIGESTION OF AQUEOUS SAMPLES (CLP) ILM01 P930.6.1
 Prep: TOX CHAR LEACHING PROCEDURE (TCLP W/ ORGANICS) SW846-1311 P107.1.0

Parameter	Result	Det. Limit	Units
LEAD	0.0072	0.0060	mg/L

1:2 DILUTION

PROJECT RECORD

MANGANESE ICP (CLP) ILM01

Analyst: M. JAO Analysis Date: 10-SEP-93 08:00 Instrument: ICP Test: M919.3.0
 Prep: FAA OR ICP ACID DIGESTION OF AQUEOUS SAMPLES (CLP) ILM01 P930.4.1
 Prep: TOX CHAR LEACHING PROCEDURE (TCLP W/ ORGANICS) SW846-1311 P107.1.0

Parameter	Result	Det. Limit	Units
MANGANESE	0.53	0.010	mg/L

MERCURY CVAA (CLP) ILM01

Analyst: G. MAPP Analysis Date: 10-SEP-93 Instrument: CVAA Test: M920.2.0
 Prep: MERCURY CVAA ACID DIGESTION OF AQUEOUS SAMPLES (CLP) ILM01 P931.6.0
 Prep: TOX CHAR LEACHING PROCEDURE (TCLP W/ ORGANICS) SW846-1311 P107.1.0

Parameter	Result	Det. Limit	Units
MERCURY	BDL	0.00050	mg/L

NICKEL ICP (CLP) ILM01

Analyst: M. JAO Analysis Date: 07-SEP-93 08:00 Instrument: ICP Test: M922.3.0
 Prep: FAA OR ICP ACID DIGESTION OF AQUEOUS SAMPLES (CLP) ILM01 P930.4.0
 Prep: TOX CHAR LEACHING PROCEDURE (TCLP W/ ORGANICS) SW846-1311 P107.1.0

Parameter	Result	Det. Limit	Units
NICKEL	BDL	0.010	mg/L

TIN ICP SW846-6010A

Analyst: M. JAO Analysis Date: 10-SEP-93 08:00 Instrument: ICP Test: M135.3.0
 Prep: FAA OR ICP ACID DIGESTION OF AQUEOUS SAMPLES (CLP) ILM01 P930.4.1
 Prep: TOX CHAR LEACHING PROCEDURE (TCLP W/ ORGANICS) SW846-1311 P107.1.0

Parameter	Result	Det. Limit	Units
TIN	BDL	0.050	mg/L

LVER ICP (CLP) ILM01

Analyst: M. JAO Analysis Date: 10-SEP-93 08:00 Instrument: ICP Test: M930.3.0
 Prep: FAA OR ICP ACID DIGESTION OF AQUEOUS SAMPLES (CLP) ILM01 P930.4.1
 Prep: TOX CHAR LEACHING PROCEDURE (TCLP W/ ORGANICS) SW846-1311 P107.1.0

Parameter	Result	Det. Limit	Units
SILVER	BDL	0.010	mg/L

SELENIUM GFAA (CLP) ILM01

Analyst: M. BAUER Analysis Date: 13-SEP-93 Instrument: GFAA Test: M928.2.0
 Prep: GFAA ACID DIGESTION OF AQUEOUS SAMPLES (CLP) ILM01 P930.6.1
 Prep: TOX CHAR LEACHING PROCEDURE (TCLP W/ ORGANICS) SW846-1311 P107.1.0

Parameter	Result	Det. Limit	Units
SELENIUM	BDL	0.0050	mg/L

VANADIUM ICP (CLP) ILM01

Analyst: M. JAO Analysis Date: 07-SEP-93 08:00 Instrument: ICP Test: M938.3.0
 Prep: FAA OR ICP ACID DIGESTION OF AQUEOUS SAMPLES (CLP) ILM01 P930.4.0
 Prep: TOX CHAR LEACHING PROCEDURE (TCLP W/ ORGANICS) SW846-1311 P107.1.0

Parameter	Result	Det. Limit	Units
VANADIUM	BDL	0.010	mg/L

ZINC ICP (CLP) ILM01

Analyst: M. JAO Analysis Date: 07-SEP-93 08:00 Instrument: ICP Test: M939.3.0
 Prep: FAA OR ICP ACID DIGESTION OF AQUEOUS SAMPLES (CLP) ILM01 P930.4.0
 Prep: TOX CHAR LEACHING PROCEDURE (TCLP W/ ORGANICS) SW846-1311 P107.1.0

Parameter	Result	Det. Limit	Units
.NC	3.9	0.020	mg/L

PROJECT RECORD

NEUTRAL WATER LEACHING METHOD (SW846-1310 MODIFIED) SW846-1310(MOD)			
Analyst: B. HAHN		Analysis Date: 08-SEP-93	
		Test: P105.1.0	
Parameter	Result	Det. Limit	Units
TOTAL SAMPLE WEIGHT	100		Grams
LIQUID FRACTION (GRAMS)	NA		Grams
EXTRACTED SAMPLE	100		Grams
SOLIDS	100		Percent
9.5 MM SIEVE TEST			Passed
INITIAL PH	4.86		Std. Units
FINAL PH	4.46		Std. Units
INITIAL DI ADDED	1600		mL
FINAL DI ADDED	2000		mL
TOTAL ACID ADDED	NA		mL
VOLUME LIQUID (ADD BACK)	NA		mL
TOTAL VOLUME FILTRATE	2000		mL
INITIAL TIME	10104.4		Hours
FINAL TIME	10128.3		Hours

CYANIDE DISTILLATION (CLP) ILM01			
Analyst: J. STOKES		Analysis Date: 10-SEP-93	
Prep: NEUTRAL WATER LEACHING METHOD (SW846-1310 MODIFIED) SW846-1310(MOD) P105.1.0		Test: P901.4.0	
Parameter	Result	Det. Limit	Units
INITIAL WEIGHT OR VOLUME	500		mL
FINAL VOLUME	250		mL

CYANIDE, TOTAL (AUTOMATED) (CLP) ILM01			
Analyst: J. WILDER		Analysis Date: 10-SEP-93	
Prep: CYANIDE DISTILLATION (CLP) ILM01 P901.4.0		Instrument: AUTO-ANALYZER	
ep: NEUTRAL WATER LEACHING METHOD (SW846-1310 MODIFIED) SW846-1310(MOD) P105.1.0		Test: G901.4.0	
Parameter	Result	Det. Limit	Units
CYANIDE	BDL	0.005	mg/L

Sample Comments

ADDITIONAL SAMPLE RECEIVED INTO THE LABORATORY ON 09/07/93. IT WAS SAMPLED ON 09/07/93 AT 11:00AM. DCE THIS IS A MODIFIED REPORT. REPORT RE-ISSUED TO INCLUDE PYRIDINE AND 3-METHYLPHENOL. (BOTH NON-DETECTED IN SEMIVOLTILE ANALYSIS) CCB 10/12/93

BDL Below Detection Limit
 EST Estimated Value
 NA Not Applicable
 RT Retention Time

Sample chain of custody number 14513.

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PROJECT RECORD

Quality Assurance Officer: _____

J. A. Bush

C E R T I F I C A T E O F A N A L Y S I S

Service Location TRITAGE LABORATORIES, INC. 1001 W. MORRIS ST. INDIANAPOLIS, IN 46231 (317)243-8305	Received 27-SEP-93	Project 2471	Lab ID A291100
	Complete 12-OCT-93	PO Number 92005 *	
	Printed 13-OCT-93	Sampled 31-AUG-93	

Report To JIM FIFE AWD TECHNOLOGIES, INC. 3553 FOUNDERS RD C/O RESIDENCE INN INDIANAPOLIS, IN 46268	Bill To ACCOUNTS PAYABLE AWD TECHNOLOGIES, INC. BUILDING 3, SUITE 300 PENN CENTER WEST PITTSBURGH, PA 15276
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Sample Description

DESCRIPTION: ECC-04A1-PBM-04
 LOCATION: ECC - ZIONSVILLE

TOTAL AVAILABLE SULFIDE EXTRACTION SW 7.3.4.1 Analyst: L. WILSON Analysis Date: 28-SEP-93 Test: P116.2.0			
Parameter	Result	Det. Limit	Units
INITIAL WEIGHT OR VOLUME	10		Grams
FINAL VOLUME	100		mL

SULFIDE SW846-9030A Analyst: L. WILSON Analysis Date: 28-SEP-93 Test: G110.4.0 Prep: TOTAL AVAILABLE SULFIDE EXTRACTION SW 7.3.4.1 P116.2.0			
Parameter	Result	Det. Limit	Units
SULFIDE	BDL	10	mg/kg

PCB SONICATION EXTRACTION SW846-3550 Analyst: J. ISENBERG Analysis Date: 27-SEP-93 Test: P231.1.0			
Parameter	Result	Det. Limit	Units
INITIAL WEIGHT OR VOLUME	10.01		Grams
FINAL VOLUME	100		mL

POLYCHLORINATED BIPHENYLS (PCBS) SW846-8080 Analyst: L. WILLIAMS Analysis Date: 28-SEP-93 Instrument: GC/ECD Test: Q301.2.0 Prep: PCB SONICATION EXTRACTION SW846-3550 P231.1.0			
Parameter	Result	Det. Limit	Units
PCB AROCHLOR 1016	BDL	1.0	mg/kg
PCB AROCHLOR 1221	BDL	5.0	mg/kg
PCB AROCHLOR 1232	BDL	1.0	mg/kg
PCB AROCHLOR 1242	BDL	1.0	mg/kg
PCB AROCHLOR 1248	BDL	1.0	mg/kg
PCB AROCHLOR 1254	BDL	1.0	mg/kg
PCB AROCHLOR 1260	BDL	1.0	mg/kg
PCB AROCHLOR 1262	BDL	1.0	mg/kg

Sample Comments

Below Detection Limit

PROJECT RECORD

Sample Comments

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without the written approval of the lab.*

PROJECT RECORD



Quality Assurance Officer: _____

QUALITY ASSURANCE REPORT

Service Location HERITAGE LABORATORIES, INC. 901 W. MORRIS ST. INDIANAPOLIS, IN 46231 (317)243-8305	Received	Lab ID
	31-AUG-93	A288829
	Complete	PO Number
	17-SEP-93	92005 *
	Printed	Sampled
	23-SEP-93	31-AUG-93 13:00

SAMPLE I.D.: ECC-04A1-PBM-01 DESCRIPTION: CONCRETE LOCATION: ECC -ZIONSVILLE	Sample Description <h2 style="margin: 0;">PROJECT RECORD</h2>
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CLP VOLATILE ORGANICS OLMO1			
Analyst : G. WILSON	Analysis Date: 07-SEP-93	Instrument: GC/MS VOA	Test: 0902.2.0
Reviewer: A. BRADBURN	Review Date: 08-SEP-93	File ID: >0530C	Run: R196156
Prep: ZERO HEADSPACE EXTRACTION (TCLP) SW846-1311			

QC Type	Identifier	Source	Parameter	True/Sampl	Spike Val	Observed	Units	% Rec	RPD
SPI01	Q777094	A288621	1,1-DICHLOROETHENE	0	50	48	ug/L	96	
SPI01	Q777094	A288621	TRICHLOROETHENE	0	50	47	ug/L	94	
SPI01	Q777094	A288621	BENZENE	0	50	51	ug/L	102	
SPI01	Q777094	A288621	TOLUENE	0	50	47	ug/L	94	
SPI01	Q777094	A288621	CHLOROBENZENE	0	50	50	ug/L	100	
DPS01	Q777095	A288621	1,1-DICHLOROETHENE	0	50	51	ug/L	102	6.1
DPS01	Q777095	A288621	TRICHLOROETHENE	0	50	47	ug/L	94	0
DPS01	Q777095	A288621	BENZENE	0	50	50	ug/L	100	2
DPS01	Q777095	A288621	TOLUENE	0	50	46	ug/L	92	2.2
DPS01	Q777095	A288621	CHLOROBENZENE	0	50	50	ug/L	100	0
	Q777112		See Attached Report x0520c.ind						
BLA01	Q777113		See Attached Report x0521c.ind						
SAMPLE	A288829		See Certificate of Analysis						

CLP SEMI-VOLATILE ORGANICS OLMO1			
Analyst : A. BRADBURN	Analysis Date: 14-SEP-93	Instrument: GC/MS SVOA	Test: 0901.2.0
Reviewer: S. BROTHERTON	Review Date: 17-SEP-93	File ID: >4475F	Run: R196847
Prep: CLP SEMI-VOLATILE EXTRACTION OLMO1			
Prep: TOX CHAR LEACHING PROCEDURE (TCLP W/ ORGANICS) SW846-1311			

QC Type	Identifier	Source	Parameter	True/Sampl	Spike Val	Observed	Units	% Rec	RPD
DPS02	Q777406	A288829	PHENOL	5	200	130	ug/L	62.5	8.3
DPS02	Q777406	A288829	2-CHLOROPHENOL	0	200	140	ug/L	70	0
DPS02	Q777406	A288829	1,4-DICHLOROBENZENE (P-DICHLOROBENZENE)	0	100	66	ug/L	66	14.1
DPS02	Q777406	A288829	N-NITROSO-DI-N-PROPYLAMINE	0	100	54	ug/L	54	35.1
DPS02	Q777406	A288829	1,2,4-TRICHLOROBENZENE	0	100	69	ug/L	69	14.8
DPS02	Q777406	A288829	4-CHLORO-3-METHYLPHENOL	0	200	110	ug/L	55	0
DPS02	Q777406	A288829	ACENAPHTHENE	0	100	66	ug/L	66	14.1
DPS02	Q777406	A288829	4-NITROPHENOL	0	200	120	ug/L	60	15.4
DPS02	Q777406	A288829	2,4-DINITROTOLUENE	0	100	62	ug/L	62	22.9
DPS02	Q777406	A288829	PENTACHLOROPHENOL	0	200	160	ug/L	80	17.1
DPS02	Q777406	A288829	PYRENE	0	100	73	ug/L	73	27.2
SPI02	Q777405	A288829	PHENOL	5	200	120	ug/L	57.5	
SPI02	Q777405	A288829	2-CHLOROPHENOL	0	200	140	ug/L	70	
SPI02	Q777405	A288829	1,4-DICHLOROBENZENE (P-DICHLOROBENZENE)	0	100	76	ug/L	76	
SPI02	Q777405	A288829	N-NITROSO-DI-N-PROPYLAMINE	0	100	77	ug/L	77	
SPI02	Q777405	A288829	1,2,4-TRICHLOROBENZENE	0	100	80	ug/L	80	
SPI02	Q777405	A288829	4-CHLORO-3-METHYLPHENOL	0	200	110	ug/L	55	
SPI02	Q777405	A288829	ACENAPHTHENE	0	100	76	ug/L	76	
SPI02	Q777405	A288829	4-NITROPHENOL	0	200	140	ug/L	70	

QC Type	Identifier	Source	Parameter	True/Sampl	Spike Val	Observed	Units	% Rec	RPD
SP102	Q777405	A288829	2,4-DINITROTOLUENE	0	100	78	ug/L	78	
J2	Q777405	A288829	PENTACHLOROPHENOL	0	200	190	ug/L	95	
J2	Q777405	A288829	PYRENE	0	100	96	ug/L	96	
CCV	Q782234		See Attached Report g4465f.ind						
BLA02	Q782235		See Attached Report g4470f.ind						
SAMPLE	A288829		See Certificate of Analysis						

ANTIMONY ICP (CLP) ILM01
 Analyst: M. JAO Analysis Date: 07-SEP-93 Instrument: ICP Test: M902.3.0
 Reviewer: S. ENDERSEN Review Date: 08-SEP-93 File ID: Run: R196048
 Prep: FAA OR ICP ACID DIGESTION OF AQUEOUS SAMPLES (CLP) ILM01
 Prep: TOX CHAR LEACHING PROCEDURE (TCLP W/ ORGANICS) SW846-1311

QC Type	Identifier	Source	Parameter	True/Sampl	Spike Val	Observed	Units	% Rec	RPD
ICV01	Q776664	PERKIN ELM	ANTIMONY	0.400		0.400	mg/L	100	
DUP02	Q773991	A288829	ANTIMONY	0		BDL	mg/L		
SP102	Q773989	A288829	ANTIMONY	0	0.500	0.496	mg/L	99	
CDL01	Q776642	PERKIN ELM	ANTIMONY	0.120		0.125	mg/L	104	
CCV	Q776492	INORGANIC	ANTIMONY	1.00		1.04	mg/L	104	
BLA01	Q776486	NA	ANTIMONY			< 0.012	mg/L		
LCS	Q773987	SPEX	ANTIMONY	5.00		4.90	mg/L	98	
BLA02	Q773988	NA	ANTIMONY			< 0.012	mg/L		
SAMPLE	A288829		See Certificate of Analysis						
CCV	Q776377	INORGANIC	ANTIMONY	1.00		1.02	mg/L	102	
BLA01	Q776371	NA	ANTIMONY			< 0.012	mg/L		
CDL01	Q776706	PERKIN ELM	ANTIMONY	0.120		0.134	mg/L	112	

ARSENIC GFAA (CLP) ILM01
 Analyst: A. ROBERTSON Analysis Date: 07-SEP-93 Instrument: GFAA Test: M903.2.0
 Reviewer: S. O'NEAL Review Date: 08-SEP-93 File ID: 026936 Run: R196195
 Prep: GFAA ACID DIGESTION OF AQUEOUS SAMPLES (CLP) ILM01
 Prep: TOX CHAR LEACHING PROCEDURE (TCLP W/ ORGANICS) SW846-1311

QC Type	Identifier	Source	Parameter	True/Sampl	Spike Val	Observed	Units	% Rec	RPD
ICV01	Q777328		ARSENIC	.01		.0103	mg/L	103	
DUP02	Q773986	A288829	ARSENIC	.002		< .002	mg/L		0
SP102	Q773984	A288829	ARSENIC	0	.04	.0343	mg/L	85.8	
CCV	Q777330		ARSENIC	.02		.0187	mg/L	93.5	
BLA01	Q777331		ARSENIC			< .0008	mg/L		
CDL01	Q777332		ARSENIC	.01		.0096	mg/L	96	
LCS	Q773982		ARSENIC	.02		.0196	mg/L	98	
BLA02	Q773983		ARSENIC			< .0008	mg/L		
SAMPLE	A288829		See Certificate of Analysis						
CDL01	Q777339		ARSENIC	.01		.0091	mg/L	91	
CCV	Q777340		ARSENIC	.02		.0183	mg/L	91.5	
BLA01	Q777341		ARSENIC			< .0008	mg/L		

BARIUM ICP (CLP) ILM01
 Analyst: M. JAO Analysis Date: 07-SEP-93 Instrument: ICP Test: M904.3.0
 Reviewer: S. ENDERSEN Review Date: 08-SEP-93 File ID: Run: R196048
 Prep: FAA OR ICP ACID DIGESTION OF AQUEOUS SAMPLES (CLP) ILM01
 Prep: TOX CHAR LEACHING PROCEDURE (TCLP W/ ORGANICS) SW846-1311

QC Type	Identifier	Source	Parameter	True/Sampl	Spike Val	Observed	Units	% Rec	RPD
ICV01	Q776663	PERKIN ELM	BARIUM	2.00		2.02	mg/L	101	
J2	Q773991	A288829	BARIUM	0.689		0.731	mg/L		6
J2	Q773989	A288829	BARIUM	0.689	2.00	2.52	mg/L	92	
CDL01	Q776641	INORGANIC	BARIUM	10		10.1	mg/L	101	
ICS-A	Q776640	PERKIN ELM	BARIUM			0.478	mg/L	96	
CCV	Q776492	INORGANIC	BARIUM			5.16	mg/L	103	

PROJECT RECORD

QC Type	Identifier	Source	Parameter	True/Sampl	Spike Val	Observed	Units	% Rec	RPD
BLA01	Q776486	NA	BARIUM			< 0.004	mg/L		
	Q773987	SPEX	BARIUM	20.0		16.1	mg/L	81	
	Q773988	NA	BARIUM			< 0.004	mg/L		
SAMPLE	A288829		See Certificate of Analysis						
CCV	Q776377	INORGANIC	BARIUM	5.00		4.99	mg/L	100	
BLA01	Q776371	NA	BARIUM			< 0.004	mg/L		
ICS-A	Q776705	PERKIN ELM	BARIUM	0.500		0.475	mg/L	95	

BERYLLIUM ICP (CLP) ILM01

Analyst : M. JAO

Analysis Date: 07-SEP-93 Instrument: ICP

Test: M905.3.0

Reviewer: S. ENDERSEN

Review Date: 08-SEP-93 File ID:

Run: R196048

Prep: FAA OR ICP ACID DIGESTION OF AQUEOUS SAMPLES (CLP) ILM01

Prep: TOX CHAR LEACHING PROCEDURE (TCLP W/ ORGANICS) SW846-1311

QC Type	Identifier	Source	Parameter	True/Sampl	Spike Val	Observed	Units	% Rec	RPD
ICV01	Q776664	PERKIN ELM	BERYLLIUM	0.400		0.403	mg/L	101	
DUP02	Q773991	A288829	BERYLLIUM	0		BDL	mg/L		
SPI02	Q773989	A288829	BERYLLIUM	0	0.050	0.0435	mg/L	87	
CDL01	Q776641	INORGANIC	BERYLLIUM	10		10.1	mg/L	101	
ICS-A	Q776640	PERKIN ELM	BERYLLIUM	0.500		0.476	mg/L	95	
CCV	Q776492	INORGANIC	BERYLLIUM	5.00		5.15	mg/L	103	
BLA01	Q776486	NA	BERYLLIUM			< 0.002	mg/L		
LCS	Q773987	SPEX	BERYLLIUM	0.500		0.406	mg/L	81	
BLA02	Q773988	NA	BERYLLIUM			< 0.002	mg/L		
SAMPLE	A288829		See Certificate of Analysis						
CCV	Q776377	INORGANIC	BERYLLIUM	5.00		5.02	mg/L	100	
BLA01	Q776371	NA	BERYLLIUM			< 0.002	mg/L		
CDL01	Q776706	PERKIN ELM	BERYLLIUM	0.010		0.00711	mg/L	71	
ICS-A	Q776705	PERKIN ELM	BERYLLIUM	0.500		0.472	mg/L	94	

CADMIUM ICP (CLP) ILM01

Analyst : M. JAO

Analysis Date: 07-SEP-93 Instrument: ICP

Test: M908.3.0

Reviewer: S. ENDERSEN

Review Date: 08-SEP-93 File ID:

Run: R196048

Prep: FAA OR ICP ACID DIGESTION OF AQUEOUS SAMPLES (CLP) ILM01

Prep: TOX CHAR LEACHING PROCEDURE (TCLP W/ ORGANICS) SW846-1311

QC Type	Identifier	Source	Parameter	True/Sampl	Spike Val	Observed	Units	% Rec	RPD
ICV01	Q776664	PERKIN ELM	CADMIUM	0.400		0.417	mg/L	104	
DUP02	Q773991	A288829	CADMIUM	0		BDL	mg/L		
SPI02	Q773989	A288829	CADMIUM	0	0.050	0.0433	mg/L	87	
CDL01	Q776641	INORGANIC	CADMIUM	10		10.3	mg/L	103	
ICS-A	Q776640	PERKIN ELM	CADMIUM	1.00		0.919	mg/L	92	
CCV	Q776492	INORGANIC	CADMIUM	5.00		5.26	mg/L	105	
BLA01	Q776486	NA	CADMIUM			< 0.002	mg/L		
LCS	Q773987	SPEX	CADMIUM	0.500		0.407	mg/L	81	
BLA02	Q773988	NA	CADMIUM			< 0.002	mg/L		
SAMPLE	A288829		See Certificate of Analysis						
CCV	Q776377	INORGANIC	CADMIUM	5.00		5.08	mg/L	102	
BLA01	Q776371	NA	CADMIUM			< 0.002	mg/L		
CDL01	Q776706	PERKIN ELM	CADMIUM	0.010		0.0107	mg/L	107	
ICS-A	Q776705	PERKIN ELM	CADMIUM	1.00		0.925	mg/L	93	

PROJECT RECORD

HEXAVALENT CHROMIUM SW846-7196A

Analyst: S. PFEFFER

Analysis Date: 07-SEP-93

Test: M110.6.0

Reviewer: B. SHRAKE

Review Date: 07-SEP-93 File ID: 2151-2152

Run: R196027

Prep: TOX CHAR LEACHING PROCEDURE (TCLP W/ ORGANICS) SW846-1311

QC Type	Identifier	Source	Parameter	True/Sampl	Spike Val	Observed	Units	% Rec	RPD
ICV01	Q776132		HEXAVALENT CHROMIUM	.178		.165	mg/L	92.7	
ICV01	Q776139		HEXAVALENT CHROMIUM	.178		.154	mg/L	86.5	
SPI01	Q776136	A288829	HEXAVALENT CHROMIUM	0	.2	.202	mg/L	101	
DUP01	Q776137	A288945	HEXAVALENT CHROMIUM	.05		< .05	mg/L		0
BLA01	Q776130		HEXAVALENT CHROMIUM			-.003	mg/L		
CDL01	Q776131		HEXAVALENT CHROMIUM	.05		.051	mg/L	102	
CCV	Q776135		HEXAVALENT CHROMIUM	.2		.204	mg/L	102	
SAMPLE	A288829		See Certificate of Analysis						
BLA01	Q776138		HEXAVALENT CHROMIUM			0	mg/L		
CCV	Q776140		HEXAVALENT CHROMIUM	.2		.209	mg/L	104.5	

CHROMIUM ICP (CLP) ILM01

Analyst: M. JAO

Analysis Date: 10-SEP-93 Instrument: ICP

Test: M910.3.0

Reviewer: S. ENDERSEN

Review Date: 13-SEP-93 File ID:

Run: R196508

Prep: FAA OR ICP ACID DIGESTION OF AQUEOUS SAMPLES (CLP) ILM01

Prep: TOX CHAR LEACHING PROCEDURE (TCLP W/ ORGANICS) SW846-1311

QC Type	Identifier	Source	Parameter	True/Sampl	Spike Val	Observed	Units	% Rec	RPD
ICV01	Q779575	PERKIN ELM	CHROMIUM	0.400		0.401	mg/L	100	
SPI01	Q779599	A289027	CHROMIUM	0	0.200	0.211	mg/L	106	
DUP01	Q779600	A289027	CHROMIUM	0		BDL	mg/L		
DUP02	Q776735	A288944	CHROMIUM	0		BDL	mg/L		
SPI02	Q776733	A288944	CHROMIUM	0	0.200	0.197	mg/L	99	
CDL01	Q779673	INORGANIC	CHROMIUM	10		9.98	mg/L	100	
	Q779674	PERKIN ELM	CHROMIUM	0.500		0.437	mg/L	87	
	Q779641	INORGANIC	CHROMIUM	5.00		4.93	mg/L	99	
BLA01	Q779642	NA	CHROMIUM			< 0.004	mg/L		
LCS	Q776731	SPEX	CHROMIUM	2.00		1.83	mg/L	92	
BLA02	Q776732	NA	CHROMIUM			< 0.004	mg/L		
SAMPLE	A288829		See Certificate of Analysis						
CCV	Q779670	INORGANIC	CHROMIUM	5.00		4.96	mg/L	99	
BLA01	Q779668	NA	CHROMIUM			< 0.004	mg/L		
CDL01	Q779616	PERKIN ELM	CHROMIUM	0.020		0.0197	mg/L	99	
ICS-A	Q779615	PERKIN ELM	CHROMIUM	0.500		0.452	mg/L	90	

LEAD GFAA (CLP) ILM01

Analyst: J. WALLACE

Analysis Date: 10-SEP-93 Instrument: GFAA

Test: M916.2.0

Reviewer: S. O'NEAL

Review Date: 13-SEP-93 File ID: 026950

Run: R196571

Prep: GFAA ACID DIGESTION OF AQUEOUS SAMPLES (CLP) ILM01

Prep: TOX CHAR LEACHING PROCEDURE (TCLP W/ ORGANICS) SW846-1311

QC Type	Identifier	Source	Parameter	True/Sampl	Spike Val	Observed	Units	% Rec	RPD
ICV01	Q780015		LEAD	.01		.0106	mg/L	106	
DUP01	Q780070	A287207	LEAD	.005		< .005	mg/L		0
DUP02	Q776569	A288944	LEAD	.032		< .032	mg/L		0
SPI02	Q776567	A288944	LEAD	.032	.02	.052	mg/L	100	
CDL01	Q780028		LEAD	.003		.0033	mg/L	110	
CCV	Q780029		LEAD	.02		.0203	mg/L	101.5	
BLA01	Q780030		LEAD			< .0012	mg/L		
LCS	Q776565		LEAD	.02		.022	mg/L	110	
	Q776566		LEAD			< .0012	mg/L		
SAMPLE	A288829		See Certificate of Analysis						
LO1	Q780035		LEAD	.003		.0028	mg/L	93.3	
CCV	Q780036		LEAD	.02		.0207	mg/L	103.5	
BLA01	Q780037		LEAD			< .0012	mg/L		

PROJECT RECORD

MANGANESE ICP (CLP) ILM01

Analyst : M. JAO

Analysis Date: 10-SEP-93 Instrument: ICP

Test: M919.3.0

Reviewer: S. ENDERSEN

Review Date: 13-SEP-93 File ID:

Run: R196508

Prep: FAA OR ICP ACID DIGESTION OF AQUEOUS SAMPLES (CLP) ILM01

Prep: TOX CHAR LEACHING PROCEDURE (TCLP W/ ORGANICS) SW846-1311

QC Type	Identifier	Source	Parameter	True/Sampl	Spike Val	Observed	Units	% Rec	RPD
ICV01	Q779575	PERKIN ELM	MANGANESE	0.400		0.403	mg/L	101	
SPI01	Q779599	A289027	MANGANESE	0	0.500	0.543	mg/L	109	
DUP01	Q779600	A289027	MANGANESE	0		BDL	mg/L		
DUP02	Q776735	A288944	MANGANESE	0.565		0.552	mg/L		2
SPI02	Q776733	A288944	MANGANESE	0.565	0.500	1.00	mg/L	87	
CDL01	Q779673	INORGANIC	MANGANESE	10		9.96	mg/L	100	
ICS-A	Q779674	PERKIN ELM	MANGANESE	0.500		0.456	mg/L	91	
CCV	Q779641	INORGANIC	MANGANESE	5.00		4.91	mg/L	98	
BLA01	Q779642	NA	MANGANESE			< 0.004	mg/L		
LCS	Q776731	SPEX	MANGANESE	5.00		4.50	mg/L	90	
BLA02	Q776732	NA	MANGANESE			< 0.004	mg/L		
SAMPLE	A288829		See Certificate of Analysis						
CCV	Q779670	INORGANIC	MANGANESE	5.00		4.94	mg/L	99	
BLA01	Q779668	NA	MANGANESE			< 0.004	mg/L		
CDL01	Q779616	PERKIN ELM	MANGANESE	0.030		0.0310	mg/L	103	
ICS-A	Q779615	PERKIN ELM	MANGANESE	0.500		0.470	mg/L	94	

MERCURY CVAA (CLP) ILM01

Analyst : G. MAPP

Analysis Date: 10-SEP-93 Instrument: CVAA

Test: M920.2.0

Reviewer: R. BYERS

Review Date: 13-SEP-93 File ID: 026958

Run: R196597

Prep: MERCURY CVAA ACID DIGESTION OF AQUEOUS SAMPLES (CLP) ILM01

Prep: TOX CHAR LEACHING PROCEDURE (TCLP W/ ORGANICS) SW846-1311

QC Type	Identifier	Source	Parameter	True/Sampl	Spike Val	Observed	Units	% Rec	RPD
ICV01	Q780253		MERCURY	.002		.00195	mg/L	97.5	
DUP02	Q776579	A288830	MERCURY	.0005		< .0005	mg/L		0
SPI02	Q776577	A288830	MERCURY	0	.001	.00111	mg/L	111	
CCV	Q780339		MERCURY	.003		.00268	mg/L	89.3	
BLA01	Q780340		MERCURY			< .0002	mg/L		
LCS	Q776575		MERCURY	.003		.00292	mg/L	97.3	
BLA02	Q776576		MERCURY			< .0002	mg/L		
SAMPLE	A288829		See Certificate of Analysis						
CCV	Q780341		MERCURY	.003		.00268	mg/L	89.3	
BLA01	Q780342		MERCURY			< .00026	mg/L		

NICKEL ICP (CLP) ILM01

Analyst : M. JAO

Analysis Date: 07-SEP-93 Instrument: ICP

Test: M922.3.0

Reviewer: S. ENDERSEN

Review Date: 08-SEP-93 File ID:

Run: R196048

Prep: FAA OR ICP ACID DIGESTION OF AQUEOUS SAMPLES (CLP) ILM01

Prep: TOX CHAR LEACHING PROCEDURE (TCLP W/ ORGANICS) SW846-1311

QC Type	Identifier	Source	Parameter	True/Sampl	Spike Val	Observed	Units	% Rec	RPD
ICV01	Q776664	PERKIN ELM	NICKEL	0.400		0.417	mg/L	104	
DUP02	Q773991	A288829	NICKEL	0.0112		0.0117	mg/L		4
SPI02	Q773989	A288829	NICKEL	0.0112	0.500	0.514	mg/L	101	
CDL01	Q776641	INORGANIC	NICKEL	10		10.2	mg/L	102	
ICS-A	Q776640	PERKIN ELM	NICKEL	1.00		0.896	mg/L	90	
CCV	Q776492	INORGANIC	NICKEL	5.00		5.26	mg/L	105	
BLA01	Q776486	NA	NICKEL			< 0.004	mg/L		
	Q773987	SPEX	NICKEL	5		4	mg/L	80	
	Q773988	NA	NICKEL			< 0.004	mg/L		
SAMPLE	A288829		See Certificate of Analysis						
CCV	Q776377	INORGANIC	NICKEL	5.00		5.05	mg/L	101	
BLA01	Q776371	NA	NICKEL			< 0.004	mg/L		

QC Type	Identifier	Source	Parameter	True/Sampl	Spike Val	Observed	Units	% Rec	RPD
CDL01	Q776706	PERKIN ELM	NICKEL	0.080		0.0853	mg/L	107	
	Q776705	PERKIN ELM	NICKEL	1.00		0.911	mg/L	91	

TIN ICP SW846-6010A

Analyst: M. JAO Analysis Date: 10-SEP-93 Instrument: ICP Test: M135.3.0
 Reviewer: S. ENDERSEN Review Date: 13-SEP-93 File ID: Run: R196508
 Prep: FAA OR ICP ACID DIGESTION OF AQUEOUS SAMPLES (CLP) ILM01
 Prep: TOX CHAR LEACHING PROCEDURE (TCLP W/ ORGANICS) SW846-1311

QC Type	Identifier	Source	Parameter	True/Sampl	Spike Val	Observed	Units	% Rec	RPD
DUP01	Q779600	A289027	TIN	0		BDL	mg/L		
DUP02	Q776735	A288944	TIN	0		BDL	mg/L		
SPI02	Q776733	A288944	TIN	0	2.00	1.92	mg/L	96	
CCV	Q779641	INORGANIC	TIN	5.00		4.87	mg/L	97	
BLA01	Q779642	NA	TIN			< 0.02	mg/L		
LCS	Q776731	SPEX	TIN	2.00		1.90	mg/L	95	
BLA02	Q776732	NA	TIN			< 0.02	mg/L		
SAMPLE	A288829		See Certificate of Analysis						
CCV	Q779670	INORGANIC	TIN	5.00		4.89	mg/L	98	
BLA01	Q779668	NA	TIN			< 0.02	mg/L		

SILVER ICP (CLP) ILM01

Analyst: M. JAO Analysis Date: 10-SEP-93 Instrument: ICP Test: M930.3.0
 Reviewer: S. ENDERSEN Review Date: 13-SEP-93 File ID: Run: R196508
 Prep: FAA OR ICP ACID DIGESTION OF AQUEOUS SAMPLES (CLP) ILM01
 Prep: TOX CHAR LEACHING PROCEDURE (TCLP W/ ORGANICS) SW846-1311

QC Type	Identifier	Source	Parameter	True/Sampl	Spike Val	Observed	Units	% Rec	RPD
ICV01	Q779576	PERKIN ELM	SILVER	2.00		1.97	mg/L	99	
	Q779599	A289027	SILVER	0	0.050	0.0605	mg/L	121	
	Q779600	A289027	SILVER	0		BDL	mg/L		
DUP02	Q776735	A288944	SILVER	0		BDL	mg/L		
SPI02	Q776733	A288944	SILVER	0	0.050	0.0547	mg/L	109	
CDL01	Q779673	INORGANIC	SILVER	2		2.00	mg/L	100	
ICS-A	Q779674	PERKIN ELM	SILVER	1.00		0.933	mg/L	93	
CCV	Q779641	INORGANIC	SILVER	1.00		0.990	mg/L	99	
BLA01	Q779642	NA	SILVER			< 0.004	mg/L		
LCS	Q776731	SPEX	SILVER	0.500		0.436	mg/L	87	
BLA02	Q776732	NA	SILVER			< 0.004	mg/L		
SAMPLE	A288829		See Certificate of Analysis						
CCV	Q779670	INORGANIC	SILVER	1.00		0.993	mg/L	99	
BLA01	Q779668	NA	SILVER			< 0.004	mg/L		
CDL01	Q779616	PERKIN ELM	SILVER	0.020		0.0201	mg/L	101	
ICS-A	Q779615	PERKIN ELM	SILVER	1.00		0.947	mg/L	95	

SELENIUM GFAA (CLP) ILM01

Analyst: M. BAUER Analysis Date: 13-SEP-93 Instrument: GFAA Test: M928.2.0
 Reviewer: S. O'NEAL Review Date: 14-SEP-93 File ID: 026964 Run: R196623
 Prep: GFAA ACID DIGESTION OF AQUEOUS SAMPLES (CLP) ILM01
 Prep: TOX CHAR LEACHING PROCEDURE (TCLP W/ ORGANICS) SW846-1311

QC Type	Identifier	Source	Parameter	True/Sampl	Spike Val	Observed	Units	% Rec	RPD
ICV01	Q780567		SELENIUM	.01		.0106	mg/L	106	
DUP02	Q776569	A288944	SELENIUM	.005		< .005	mg/L		0
SPI02	Q776567	A288944	SELENIUM	0	.01	.0076	mg/L	76	
	Q780575		SELENIUM	.005		.0058	mg/L	116	
	Q780576		SELENIUM	.02		.0197	mg/L	98.5	
AD1	Q780577		SELENIUM			< .002	mg/L		
LCS	Q776565		SELENIUM			.0204	mg/L	102	
BLA02	Q776566		SELENIUM			< .002	mg/L		

PROJECT RECORD

QC Type	Identifier	Source	Parameter	True/Sampl	Spike Val	Observed	Units	% Rec	RPD
SAMPLE	A28829		See Certificate of Analysis						
11	Q780578		SELENIUM	.005		.0051	mg/L	102	
	Q780579		SELENIUM	.02		.02	mg/L	100	
BLA01	Q780580		SELENIUM			< .002	mg/L		

VANADIUM ICP (CLP) ILM01

Analyst : M. JAO

Analysis Date: 07-SEP-93 Instrument: ICP

Test: M938.3.0

Reviewer: S. ENDERSEN

Review Date: 08-SEP-93 File ID:

Run: R196048

Prep: FAA OR ICP ACID DIGESTION OF AQUEOUS SAMPLES (CLP) ILM01

Prep: TOX CHAR LEACHING PROCEDURE (TCLP W/ ORGANICS) SW846-1311

QC Type	Identifier	Source	Parameter	True/Sampl	Spike Val	Observed	Units	% Rec	RPD
ICV01	Q776664	PERKIN ELM	VANADIUM	0.400		0.404	mg/L	101	
DUP02	Q773991	A288829	VANADIUM	0.0113		0.0128	mg/L		12
SPI02	Q773989	A288829	VANADIUM	0.0113	0.500	0.465	mg/L	91	
CDL01	Q776641	INORGANIC	VANADIUM	10		10.2	mg/L	102	
ICS-A	Q776640	PERKIN ELM	VANADIUM	0.500		0.462	mg/L	92	
CCV	Q776492	INORGANIC	VANADIUM	5.00		5.30	mg/L	106	
BLA01	Q776486	NA	VANADIUM			< 0.004	mg/L		
LCS	Q773987	SPEX	VANADIUM	5.00		4.02	mg/L	80	
BLA02	Q773988	NA	VANADIUM			< 0.004	mg/L		
SAMPLE	A288829		See Certificate of Analysis						
CCV	Q776377	INORGANIC	VANADIUM	5.00		5.08	mg/L	102	
BLA01	Q776371	NA	VANADIUM			< 0.004	mg/L		
CDL01	Q776706	PERKIN ELM	VANADIUM	0.100		0.101	mg/L	101	
ICS-A	Q776705	PERKIN ELM	VANADIUM	0.500		0.469	mg/L	94	

ZINC ICP (CLP) ILM01

Analyst : M. JAO

Analysis Date: 07-SEP-93 Instrument: ICP

Test: M939.3.0

Reviewer: S. ENDERSEN

Review Date: 08-SEP-93 File ID:

Run: R196048

Prep: FAA OR ICP ACID DIGESTION OF AQUEOUS SAMPLES (CLP) ILM01

Prep: TOX CHAR LEACHING PROCEDURE (TCLP W/ ORGANICS) SW846-1311

QC Type	Identifier	Source	Parameter	True/Sampl	Spike Val	Observed	Units	% Rec	RPD
ICV01	Q776664	PERKIN ELM	ZINC	0.400		0.428	mg/L	107	
DUP02	Q773991	A288829	ZINC	0.467		0.482	mg/L		3
SPI02	Q773989	A288829	ZINC	0.467	0.500	0.926	mg/L	92	
CDL01	Q776641	INORGANIC	ZINC	10		10.1	mg/L	101	
ICS-A	Q776640	PERKIN ELM	ZINC	1.00		0.963	mg/L	96	
CCV	Q776492	INORGANIC	ZINC	5		5.51	mg/L	110	
BLA01	Q776486	NA	ZINC			< 0.008	mg/L		
LCS	Q773987	SPEX	ZINC	5		3.99	mg/L	80	
BLA02	Q773988	NA	ZINC			.0301	mg/L		
SAMPLE	A288829		See Certificate of Analysis						
CCV	Q776377	INORGANIC	ZINC	5.00		5.18	mg/L	104	
BLA01	Q776371	NA	ZINC			< 0.008	mg/L		
CDL01	Q776706	PERKIN ELM	ZINC	0.040		0.0735	mg/L	184	
ICS-A	Q776705	PERKIN ELM	ZINC	1.00		0.993	mg/L	99	

CYANIDE, TOTAL (AUTOMATED) (CLP) ILM01

Analyst : J. WILDER

Analysis Date: 07-SEP-93 Instrument: AUTO-ANALYZER

Test: G901.6.0

Reviewer: E. SHRAKE

Review Date: 08-SEP-93 File ID: 1034

Run: R196118

Prep: CYANIDE DISTILLATION (CLP) ILM01

Prep: NEUTRAL WATER LEACHING METHOD (SW846-1310 MODIFIED) SW846-1310(MOD)

Type	Identifier	Source	Parameter	True/Sampl	Spike Val	Observed	Units	% Rec	RPD
01	Q776758		CYANIDE	.205		.168	mg/L	82	
ICV01	Q776796		CYANIDE	.205		.17	mg/L	82.9	
DUP01	Q776791	L101282	CYANIDE	.1		< .1	mg/kg		0
DPS02	Q776775	A288849	CYANIDE	0	2.5	2.2	mg/kg	88	2.3

PROJECT RECORD

QUALITY ASSURANCE REPORT

Service Location HERITAGE LABORATORIES, INC. 901 W. MORRIS ST. INDIANAPOLIS, IN 46231 (317)243-8305	Received	Lab ID
	27-SEP-93	A291101
	Complete	PO Number
	12-OCT-93	92005 *
	Printed	Sampled
	13-OCT-93	31-AUG-93

Sample Description

DESCRIPTION: ECC-04A1-PBM-01
 LOCATION: ECC - ZIONSVILLE

SULFIDE SW846-9030A		Analysis Date: 28-SEP-93		Test: G110.4.0					
Analyst : L. WILSON		Review Date: 28-SEP-93		File ID: 1480-1482					
Reviewer: B. SHRAKE		Prep: TOTAL AVAILABLE SULFIDE EXTRACTION SW 7.3.4.1		Run: R198019					
QC Type	Identifier	Source	Parameter	True/Sampl	Spike Val	Observed	Units	% Rec	RPD
DUP02	Q791042	D117815	SULFIDE	10		< 10	mg/kg		0
BLA01	Q791040		SULFIDE			.259	mg/L		
LCS	Q791044		SULFIDE	72.8		85.5	mg/L	117.4	
SAMPLE	A291101		See Certificate of Analysis						
LCS	Q791045		SULFIDE	72.8		81.7	mg/L	112.2	

POLYCHLORINATED BIPHENYLS (PCBS) SW846-8080		Analysis Date: 28-SEP-93		Instrument: GC/EC		Test: Q301.2.0			
Analyst : L. WILLIAMS		Review Date: 28-SEP-93		File ID: 4412		Run: R197982			
Reviewer: L. JULIAN		Prep: PCB SONICATION EXTRACTION SW846-3550							
QC Type	Identifier	Source	Parameter	True/Sampl	Spike Val	Observed	Units	% Rec	RPD
CV01	Q790741		PCB AROCHLOR 1248	.45		.415	mg/L	92.2	
ICV01	Q790741		PCB AROCHLOR 1260	.45		.493	mg/L	109.6	
DPS02	Q783695	A290125	PCB AROCHLOR 1260	0	8.81	9.3	mg/kg	105.6	8.8
SP102	Q783694	A290125	PCB AROCHLOR 1260	0	8.97	8.67	mg/kg	96.7	
CCV	Q790744		PCB AROCHLOR 1248	.5		.499	mg/L	99.8	
CCV	Q790744		PCB AROCHLOR 1260	.5		.523	mg/L	104.6	
BLA02	Q783692	EMS	PCB AROCHLOR 1016			< .4	mg/kg		
BLA02	Q783692	EMS	PCB AROCHLOR 1221			< 2	mg/kg		
BLA02	Q783692	EMS	PCB AROCHLOR 1232			< .4	mg/kg		
BLA02	Q783692	EMS	PCB AROCHLOR 1242			< .4	mg/kg		
BLA02	Q783692	EMS	PCB AROCHLOR 1248			< .4	mg/kg		
BLA02	Q783692	EMS	PCB AROCHLOR 1254			< .4	mg/kg		
BLA02	Q783692	EMS	PCB AROCHLOR 1260			< .4	mg/kg		
LCS	Q783693		PCB AROCHLOR 1260	8.99		7.2	mg/kg	80.1	
SAMPLE	A291101		See Certificate of Analysis						

Notes

< Less Than Lower Detection Limit

PROJECT RECORD

Quality Assurance Officer: _____

CB Boyle

QUALITY ASSURANCE REPORT

Service Location HERITAGE LABORATORIES, INC. 301 W. MORRIS ST. INDIANAPOLIS, IN 46231 (317)243-8305	Received	Lab ID
	31-AUG-93	A288830
	Complete	PO Number
	17-SEP-93	92005 *
	Printed	Sampled
	23-SEP-93	31-AUG-93 13:40

SAMPLE I.D.: ECC-04A1-PBM-02 DESCRIPTION: FIBERGLASS LOCATION: ECC -ZIONSVILLE	Sample Description <h2 style="margin: 0;">PROJECT RECORD</h2>
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CLP VOLATILE ORGANICS OLMO1				Analyst : G. WILSON		Analysis Date: 07-SEP-93		Instrument: GC/MS VOA		Test: 0902.2.0	
Reviewer: A. BRADBURN				Review Date: 08-SEP-93		File ID: >0531C		Run: R196156			
Prep: ZERO HEADSPACE EXTRACTION (TCLP) SW846-1311											
QC Type	Identifier	Source	Parameter	True/Sampl	Spike Val	Observed	Units	% Rec	RPD		
SP101	Q777094	A288621	1,1-DICHLOROETHENE	0	50	48	ug/L	96			
SP101	Q777094	A288621	TRICHLOROETHENE	0	50	47	ug/L	94			
SP101	Q777094	A288621	BENZENE	0	50	51	ug/L	102			
SP101	Q777094	A288621	TOLUENE	0	50	47	ug/L	94			
SP101	Q777094	A288621	CHLOROBEZENE	0	50	50	ug/L	100			
DPS01	Q777095	A288621	1,1-DICHLOROETHENE	0	50	51	ug/L	102	6.1		
DPS01	Q777095	A288621	TRICHLOROETHENE	0	50	47	ug/L	94	0		
DPS01	Q777095	A288621	BENZENE	0	50	50	ug/L	100	2		
DPS01	Q777095	A288621	TOLUENE	0	50	46	ug/L	92	2.2		
	Q777095	A288621	CHLOROBEZENE	0	50	50	ug/L	100	0		
	Q777112		See Attached Report x0520c.ind								
BLAQ1	Q777113		See Attached Report x0521c.ind								
SAMPLE	A288830		See Certificate of Analysis								

CLP SEMI-VOLATILE ORGANICS OLMO1				Analyst : A. BRADBURN		Analysis Date: 14-SEP-93		Instrument: GC/MS SVOA		Test: 0901.2.0	
Reviewer: S. BROTHERTON				Review Date: 17-SEP-93		File ID: >4471F		Run: R196847			
Prep: CLP SEMI-VOLATILE EXTRACTION OLMO1											
Prep: TOX CHAR LEACHING PROCEDURE (TCLP W/ ORGANICS) SW846-1311											
QC Type	Identifier	Source	Parameter	True/Sampl	Spike Val	Observed	Units	% Rec	RPD		
DPS02	Q777406	A288829	PHENOL	5	200	130	ug/L	62.5	8.3		
DPS02	Q777406	A288829	2-CHLOROPHENOL	0	200	140	ug/L	70	0		
DPS02	Q777406	A288829	1,4-DICHLOROBENZENE (P-DICHLOROBENZE	0	100	66	ug/L	66	14.1		
DPS02	Q777406	A288829	N-NITROSO-DI-N-PROPYLAMINE	0	100	54	ug/L	54	35.1		
DPS02	Q777406	A288829	1,2,4-TRICHLOROBENZENE	0	100	69	ug/L	69	14.8		
DPS02	Q777406	A288829	4-CHLORO-3-METHYLPHENOL	0	200	110	ug/L	55	0		
DPS02	Q777406	A288829	ACENAPHTHENE	0	100	66	ug/L	66	14.1		
DPS02	Q777406	A288829	4-NITROPHENOL	0	200	120	ug/L	60	15.4		
DPS02	Q777406	A288829	2,4-DINITROTOLUENE	0	100	62	ug/L	62	22.9		
DPS02	Q777406	A288829	PENTACHLOROPHENOL	0	200	160	ug/L	80	17.1		
DPS02	Q777406	A288829	PYRENE	0	100	73	ug/L	73	27.2		
SP102	Q777405	A288829	PHENOL	5	200	120	ug/L	57.5			
SP102	Q777405	A288829	2-CHLOROPHENOL	0	200	140	ug/L	70			
SP102	Q777405	A288829	1,4-DICHLOROBENZENE (P-DICHLOROBENZE	0	100	76	ug/L	76			
?	Q777405	A288829	N-NITROSO-DI-N-PROPYLAMINE	0	100	77	ug/L	77			
?	Q777405	A288829	1,2,4-TRICHLOROBENZENE	0	100	80	ug/L	80			
102	Q777405	A288829	4-CHLORO-3-METHYLPHENOL	0	200	110	ug/L	55			
SP102	Q777405	A288829	ACENAPHTHENE	0	100	76	ug/L	76			
SP102	Q777405	A288829	4-NITROPHENOL	0	200	140	ug/L	70			

GC Type	Identifier	Source	Parameter	True/Sampl	Spike Val	Observed	Units	% Rec	RPD
SPI02	Q777405	A288829	2,4-DINITROTOLUENE	0	100	78	ug/L	78	
?	Q777405	A288829	PENTACHLOROPHENOL	0	200	190	ug/L	95	
?	Q777405	A288829	PYRENE	0	100	96	ug/L	96	
CCV	Q782234		See Attached Report g4465f.ind						
BLA02	Q782235		See Attached Report g4470f.ind						
SAMPLE	A288830		See Certificate of Analysis						

CLP SEMI-VOLATILE ORGANICS OLMO1

Analyst: A. BRADBURN Analysis Date: 15-SEP-93 Instrument: GC/MS SVOA Test: 0901.2.1
 Reviewer: S. BROTHERTON Review Date: 17-SEP-93 File ID: >4484F Run: R197020
 Prep: CLP SEMI-VOLATILE EXTRACTION OLMO1
 Prep: TOX CHAR LEACHING PROCEDURE (TCLP W/ ORGANICS) SW846-1311

GC Type	Identifier	Source	Parameter	True/Sampl	Spike Val	Observed	Units	% Rec	RPD
SPI02	Q777405	A288829	PHENOL	5	200	120	ug/L	57.5	
SPI02	Q777405	A288829	2-CHLOROPHENOL	0	200	140	ug/L	70	
SPI02	Q777405	A288829	1,4-DICHLOROBENZENE (P-DICHLOROBENZENE)	0	100	76	ug/L	76	
SPI02	Q777405	A288829	N-NITROSO-DI-N-PROPYLAMINE	0	100	77	ug/L	77	
SPI02	Q777405	A288829	1,2,4-TRICHLOROBENZENE	0	100	80	ug/L	80	
SPI02	Q777405	A288829	4-CHLORO-3-METHYLPHENOL	0	200	110	ug/L	55	
SPI02	Q777405	A288829	ACENAPHTHENE	0	100	76	ug/L	76	
SPI02	Q777405	A288829	4-NITROPHENOL	0	200	140	ug/L	70	
SPI02	Q777405	A288829	2,4-DINITROTOLUENE	0	100	78	ug/L	78	
SPI02	Q777405	A288829	PENTACHLOROPHENOL	0	200	190	ug/L	95	
SPI02	Q777405	A288829	PYRENE	0	100	96	ug/L	96	
DPS02	Q777406	A288829	PHENOL	5	200	130	ug/L	62.5	8.3
DPS02	Q777406	A288829	2-CHLOROPHENOL	0	200	140	ug/L	70	0
DPS02	Q777406	A288829	1,4-DICHLOROBENZENE (P-DICHLOROBENZENE)	0	100	66	ug/L	66	14.1
DPS02	Q777406	A288829	N-NITROSO-DI-N-PROPYLAMINE	0	100	54	ug/L	54	35.1
DPS02	Q777406	A288829	1,2,4-TRICHLOROBENZENE	0	100	69	ug/L	69	14.8
DPS02	Q777406	A288829	4-CHLORO-3-METHYLPHENOL	0	200	110	ug/L	55	0
DPS02	Q777406	A288829	ACENAPHTHENE	0	100	66	ug/L	66	14.1
DPS02	Q777406	A288829	4-NITROPHENOL	0	200	120	ug/L	60	15.4
DPS02	Q777406	A288829	2,4-DINITROTOLUENE	0	100	62	ug/L	62	22.9
DPS02	Q777406	A288829	PENTACHLOROPHENOL	0	200	160	ug/L	80	17.1
DPS02	Q777406	A288829	PYRENE	0	100	73	ug/L	73	27.2
CCV	Q783407		See Attached Report g4480f.ind						
BLA02	Q782235		See Attached Report g4470f.ind						
SAMPLE	A288830		See Certificate of Analysis						

ANTIMONY ICP (CLP) ILMO1

Analyst: M. JAO Analysis Date: 10-SEP-93 Instrument: ICP Test: M902.3.0
 Reviewer: S. EMDERSEN Review Date: 13-SEP-93 File ID: Run: R196508
 Prep: FAA OR ICP ACID DIGESTION OF AQUEOUS SAMPLES (CLP) ILMO1
 Prep: TOX CHAR LEACHING PROCEDURE (TCLP W/ ORGANICS) SW846-1311

GC Type	Identifier	Source	Parameter	True/Sampl	Spike Val	Observed	Units	% Rec	RPD
ICV01	Q779575	PERKIN ELM	ANTIMONY	0.400		0.398	mg/L	100	
DUP01	Q779600	A289027	ANTIMONY	0		BDL	mg/L		
DUP02	Q776735	A288944	ANTIMONY	0		BDL	mg/L		
SPI02	Q776733	A288944	ANTIMONY	0	0.500	0.533	mg/L	107	
CDL01	Q779675	PERKIN ELM	ANTIMONY	0.120		0.132	mg/L	110	
CCV	Q779641	INORGANIC	ANTIMONY	1.00		0.971	mg/L	97	
BLA01	Q779642	NA	ANTIMONY			< 0.012	mg/L		
BLA01	Q776731	SPEX	ANTIMONY	5.00		4.96	mg/L	99	
BLA01	Q776732	NA	ANTIMONY			< 0.012	mg/L		
SAMPLE	A288830		See Certificate of Analysis						
CCV	Q779670	INORGANIC	ANTIMONY	1.00		0.971	mg/L	97	
BLA01	Q779668	NA	ANTIMONY			< 0.012	mg/L		

QC Type	Identifier	Source	Parameter	True/Sampl	Spike Val	Observed	Units	% Rec	RPD
CDL01	Q779616	PERKIN ELM	ANTIMONY	0.120		0.127	mg/L	106	

ARSENIC GFAA (CLP) ILM01

Analyst : A. ROBERTSON Analysis Date: 10-SEP-93 Instrument: GFAA Test: M903.2.0
 Reviewer: S. O'NEAL Review Date: 13-SEP-93 File ID: 026951 Run: R196572
 Prep: GFAA ACID DIGESTION OF AQUEOUS SAMPLES (CLP) ILM01
 Prep: TOX CHAR LEACHING PROCEDURE (TCLP W/ ORGANICS) SW846-1311

QC Type	Identifier	Source	Parameter	True/Sampl	Spike Val	Observed	Units	% Rec	RPD
ICV01	Q780020		ARSENIC	.01		.0099	mg/L	99	
DUP02	Q776569	A288944	ARSENIC	.02		< .02	mg/L		0
SPI02	Q776567	A288944	ARSENIC	0	.04	.0312	mg/L	78	
CDL01	Q780047		ARSENIC	.01		.0109	mg/L	109	
CCV	Q780048		ARSENIC	.02		.0201	mg/L	100.5	
BLA01	Q780049		ARSENIC			< .002	mg/L		
LCS	Q776565		ARSENIC	.02		.0187	mg/L	93.5	
BLA02	Q776566		ARSENIC			< .002	mg/L		
SAMPLE	A288830		See Certificate of Analysis						
CDL01	Q780054		ARSENIC	.01		.0096	mg/L	96	
CCV	Q780055		ARSENIC	.02		.0202	mg/L	101	
BLA01	Q780056		ARSENIC			< .002	mg/L		

BARIUM ICP (CLP) ILM01

Analyst : M. JAO Analysis Date: 10-SEP-93 Instrument: ICP Test: M904.3.0
 Reviewer: S. ENDERSEN Review Date: 13-SEP-93 File ID: Run: R196508
 Prep: FAA OR ICP ACID DIGESTION OF AQUEOUS SAMPLES (CLP) ILM01
 Prep: TOX CHAR LEACHING PROCEDURE (TCLP W/ ORGANICS) SW846-1311

QC Type	Identifier	Source	Parameter	True/Sampl	Spike Val	Observed	Units	% Rec	RPD
1	Q779576	PERKIN ELM	BARIUM	2.00		1.98	mg/L	99	
101	Q779599	A289027	BARIUM	0	2.00	2.14	mg/L	107	
DUP01	Q779600	A289027	BARIUM	0		BDL	mg/L		
DUP02	Q776735	A288944	BARIUM	1.28		1.28	mg/L		0
SPI02	Q776733	A288944	BARIUM	1.28	2.00	3.16	mg/L	94	
CDL01	Q779673	INORGANIC	BARIUM	10		10.0	mg/L	100	
ICS-A	Q779674	PERKIN ELM	BARIUM	0.500		0.474	mg/L	95	
CCV	Q779641	INORGANIC	BARIUM	5.00		4.95	mg/L	99	
BLA01	Q779642	NA	BARIUM			< 0.004	mg/L		
LCS	Q776731	SPEX	BARIUM	20.0		18.3	mg/L	92	
BLA02	Q776732	NA	BARIUM			.0135	mg/L		
SAMPLE	A288830		See Certificate of Analysis						
CCV	Q779670	INORGANIC	BARIUM	5.00		4.98	mg/L	100	
BLA01	Q779668	NA	BARIUM			< 0.004	mg/L		
ICS-A	Q779615	PERKIN ELM	BARIUM	0.500		0.476	mg/L	95	

BERYLLIUM ICP (CLP) ILM01

Analyst : M. JAO Analysis Date: 13-SEP-93 Instrument: ICP Test: M905.3.0
 Reviewer: S. ENDERSEN Review Date: 14-SEP-93 File ID: Run: R196609
 Prep: FAA OR ICP ACID DIGESTION OF AQUEOUS SAMPLES (CLP) ILM01
 Prep: TOX CHAR LEACHING PROCEDURE (TCLP W/ ORGANICS) SW846-1311

QC Type	Identifier	Source	Parameter	True/Sampl	Spike Val	Observed	Units	% Rec	RPD
ICV01	Q780384	PERKIN ELM	BERYLLIUM	0.400		0.402	mg/L	101	
DUP02	Q776735	A288944	BERYLLIUM	0		BDL	mg/L		
SPI02	Q776733	A288944	BERYLLIUM	0	0.050	0.0434	mg/L	87	
11	Q780372	INORGANIC	BERYLLIUM	10		10.0	mg/L	100	
A	Q780362	PERKIN ELM	BERYLLIUM	0.500		0.474	mg/L	95	
CV	Q780518	INORGANIC	BERYLLIUM	5.00		5.02	mg/L	100	
BLA01	Q780516	NA	BERYLLIUM			< 0.002	mg/L		
LCS	Q776731	SPEX	BERYLLIUM	5.0		0.469	mg/L	94	

PROJECT RECORD

QC Type	Identifier	Source	Parameter	True/Sampl	Spike Val	Observed	Units	% Rec	RPD
BLA02	Q776732	NA	BERYLLIUM			< 0.002	mg/L		
E	A288830		See Certificate of Analysis						
	Q780431	INORGANIC	BERYLLIUM	5.00		5.10	mg/L	102	
BLA01	Q780424	NA	BERYLLIUM			< 0.002	mg/L		
ICS-A	Q780525	PERKIN ELM	BERYLLIUM	0.500		0.476	mg/L	95	

CADMIUM ICP (CLP) ILM01
 Analyst: M. JAO Analysis Date: 10-SEP-93 Instrument: ICP Test: M908.3.0
 Reviewer: S. ENDERSEN Review Date: 13-SEP-93 File ID: Run: R196508
 Prep: FAA OR ICP ACID DIGESTION OF AQUEOUS SAMPLES (CLP) ILM01
 Prep: TOX CHAR LEACHING PROCEDURE (TCLP W/ ORGANICS) SW846-1311

QC Type	Identifier	Source	Parameter	True/Sampl	Spike Val	Observed	Units	% Rec	RPD
ICV01	Q779575	PERKIN ELM	CADMIUM	0.400		0.414	mg/L	104	
SPI01	Q779599	A289027	CADMIUM	0	0.050	0.0559	mg/L	112	
DUP01	Q779600	A289027	CADMIUM	0		BDL	mg/L		
DUP02	Q776735	A288944	CADMIUM	0.0234		0.0249	mg/L		6
SPI02	Q776733	A288944	CADMIUM	0.0234	0.050	0.0702	mg/L	94	
CDL01	Q779673	INORGANIC	CADMIUM	10		10.0	mg/L	100	
ICS-A	Q779674	PERKIN ELM	CADMIUM	1.00		0.893	mg/L	89	
CCV	Q779641	INORGANIC	CADMIUM	5.00		4.96	mg/L	99	
BLA01	Q779642	NA	CADMIUM			< 0.002	mg/L		
LCS	Q776731	SPEX	CADMIUM	0.500		0.474	mg/L	95	
BLA02	Q776732	NA	CADMIUM			< 0.002	mg/L		
SAMPLE	A288830		See Certificate of Analysis						
CCV	Q779670	INORGANIC	CADMIUM	5.00		4.98	mg/L	100	
BLA01	Q779668	NA	CADMIUM			.00511	mg/L		
CDL01	Q779616	PERKIN ELM	CADMIUM	0.010		0.0136	mg/L	136	
	Q779615	PERKIN ELM	CADMIUM	1.00		0.927	mg/L	93	

HEXAVALENT CHROMIUM SW846-7196A
 Analyst: S. PFEFFER Analysis Date: 15-SEP-93 Test: M110.6.0
 Reviewer: B. SHRAKE Review Date: 16-SEP-93 File ID: 2162, 2163 Run: R196865
 Prep: TOX CHAR LEACHING PROCEDURE (TCLP W/ ORGANICS) SW846-1311

QC Type	Identifier	Source	Parameter	True/Sampl	Spike Val	Observed	Units	% Rec	RPD
ICV01	Q782321		HEXAVALENT CHROMIUM	.178		.155	mg/L	87.1	
DUP01	Q782322	A288830	HEXAVALENT CHROMIUM	.05		< .05	mg/L		0
SPI01	Q782323	A288944	HEXAVALENT CHROMIUM	0	.2	.122	mg/L	61	
DPS01	Q782324	A288944	HEXAVALENT CHROMIUM	0	.2	.124	mg/L	62	1.6
BLA01	Q782319		HEXAVALENT CHROMIUM			-.002	mg/L		
CDL01	Q782320		HEXAVALENT CHROMIUM	.05		.05	mg/L	100	
SAMPLE	A288830		See Certificate of Analysis						
CCV	Q782328		HEXAVALENT CHROMIUM	.2		.207	mg/L	103.5	

CHROMIUM ICP (CLP) ILM01
 Analyst: M. JAO Analysis Date: 10-SEP-93 Instrument: ICP Test: M910.3.0
 Reviewer: S. ENDERSEN Review Date: 13-SEP-93 File ID: Run: R196508
 Prep: FAA OR ICP ACID DIGESTION OF AQUEOUS SAMPLES (CLP) ILM01
 Prep: TOX CHAR LEACHING PROCEDURE (TCLP W/ ORGANICS) SW846-1311

QC Type	Identifier	Source	Parameter	True/Sampl	Spike Val	Observed	Units	% Rec	RPD
ICV01	Q779575	PERKIN ELM	CHROMIUM	0.400		0.401	mg/L	100	
SPI01	Q779599	A289027	CHROMIUM	0	0.200	0.211	mg/L	106	
DUP01	Q779600	A289027	CHROMIUM	0		BDL	mg/L		
	Q776735	A288944	CHROMIUM	0		BDL	mg/L		
	Q776733	A288944	CHROMIUM	0	0.200	0.197	mg/L	99	
CDL01	Q779673	INORGANIC	CHROMIUM	10		9.98	mg/L	100	
ICS-A	Q779674	PERKIN ELM	CHROMIUM	0.500		0.437	mg/L	87	
CCV	Q779641	INORGANIC	CHROMIUM	5.00		4.93	mg/L	99	

PROJECT RECORD

QC Type	Identifier	Source	Parameter	True/Sampl	Spike Val	Observed	Units	% Rec	RPD
BLA01	Q779642	NA	CHROMIUM			< 0.004	mg/L		
	Q776731	SPEX	CHROMIUM	2.00		1.83	mg/L	92	
	Q776732	NA	CHROMIUM			< 0.004	mg/L		
SAMPLE	A288830		See Certificate of Analysis						
CCV	Q779670	INORGANIC	CHROMIUM	5.00		4.96	mg/L	99	
BLA01	Q779668	NA	CHROMIUM			< 0.004	mg/L		
CDL01	Q779616	PERKIN ELM	CHROMIUM	0.020		0.0197	mg/L	99	
ICS-A	Q779615	PERKIN ELM	CHROMIUM	0.500		0.452	mg/L	90	

LEAD GFAA (CLP) ILM01
 Analyst : J. WALLACE Analysis Date: 10-SEP-93 Instrument: GFAA Test: M916.2.0
 Reviewer: S. O'NEAL Review Date: 13-SEP-93 File ID: 026950 Run: R196571
 Prep: GFAA ACID DIGESTION OF AQUEOUS SAMPLES (CLP) ILM01
 Prep: TOX CHAR LEACHING PROCEDURE (TCLP W/ ORGANICS) SW846-1311

QC Type	Identifier	Source	Parameter	True/Sampl	Spike Val	Observed	Units	% Rec	RPD
ICV01	Q780015		LEAD	.01		.0106	mg/L	106	
DUP01	Q780070	A287207	LEAD	.005		< .005	mg/L		0
DUP02	Q776569	A288944	LEAD	.032		< .032	mg/L		0
SPI02	Q776567	A288944	LEAD	.032	.02	.052	mg/L	100	
CDL01	Q780028		LEAD	.003		.0033	mg/L	110	
CCV	Q780029		LEAD	.02		.0203	mg/L	101.5	
BLA01	Q780030		LEAD			< .0012	mg/L		
LCS	Q776565		LEAD	.02		.022	mg/L	110	
BLA02	Q776566		LEAD			< .0012	mg/L		
SAMPLE	A288830		See Certificate of Analysis						
CDL01	Q780035		LEAD	.003		.0028	mg/L	93.3	
CCV	Q780036		LEAD	.02		.0207	mg/L	103.5	
1	Q780037		LEAD			< .0012	mg/L		

MANGANESE ICP (CLP) ILM01
 Analyst : M. JAO Analysis Date: 10-SEP-93 Instrument: ICP Test: M919.3.0
 Reviewer: S. ENDERSEN Review Date: 13-SEP-93 File ID: Run: R196508
 Prep: FAA OR ICP ACID DIGESTION OF AQUEOUS SAMPLES (CLP) ILM01
 Prep: TOX CHAR LEACHING PROCEDURE (TCLP W/ ORGANICS) SW846-1311

QC Type	Identifier	Source	Parameter	True/Sampl	Spike Val	Observed	Units	% Rec	RPD
ICV01	Q779575	PERKIN ELM	MANGANESE	0.400		0.403	mg/L	101	
SPI01	Q779599	A289027	MANGANESE	0	0.500	0.543	mg/L	109	
DUP01	Q779600	A289027	MANGANESE	0		BDL	mg/L		
DUP02	Q776735	A288944	MANGANESE	0.565		0.552	mg/L		2
SPI02	Q776733	A288944	MANGANESE	0.565	0.500	1.00	mg/L	87	
CDL01	Q779673	INORGANIC	MANGANESE	10		9.96	mg/L	100	
ICS-A	Q779674	PERKIN ELM	MANGANESE	0.500		0.456	mg/L	91	
CCV	Q779641	INORGANIC	MANGANESE	5.00		4.91	mg/L	98	
BLA01	Q779642	NA	MANGANESE			< 0.004	mg/L		
LCS	Q776731	SPEX	MANGANESE	5.00		4.50	mg/L	90	
BLA02	Q776732	NA	MANGANESE			< 0.004	mg/L		
SAMPLE	A288830		See Certificate of Analysis						
CCV	Q779670	INORGANIC	MANGANESE	5.00		4.94	mg/L	99	
BLA01	Q779668	NA	MANGANESE			< 0.004	mg/L		
CDL01	Q779616	PERKIN ELM	MANGANESE	0.030		0.0310	mg/L	103	
ICS-A	Q779615	PERKIN ELM	MANGANESE	0.500		0.470	mg/L	94	

PROJECT RECORD

MERCURY CVAA (CLP) ILM01

Analyst: G. MAPP

Analysis Date: 10-SEP-93 Instrument: CVAA

Test: M920.2.0

Reviewer: R. BYERS

Review Date: 13-SEP-93 File ID: 026958

Run: R196597

Prep: MERCURY CVAA ACID DIGESTION OF AQUEOUS SAMPLES (CLP) ILM01

Prep: TOX CHAR LEACHING PROCEDURE (TCLP W/ ORGANICS) SW846-1311

QC Type	Identifier	Source	Parameter	True/Sampl	Spike Val	Observed	Units	% Rec	RPD
ICV01	Q780253		MERCURY	.002		.00195	mg/L	97.5	
DUP02	Q776579	A288830	MERCURY	.0005		< .0005	mg/L		0
SPI02	Q776577	A288830	MERCURY	0	.001	.00111	mg/L	111	
CCV	Q780339		MERCURY	.003		.00268	mg/L	89.3	
BLA01	Q780340		MERCURY			< .0002	mg/L		
LCS	Q776575		MERCURY	.003		.00292	mg/L	97.3	
BLA02	Q776576		MERCURY			< .0002	mg/L		
SAMPLE	A288830		See Certificate of Analysis						
CCV	Q780341		MERCURY	.003		.00268	mg/L	89.3	
BLA01	Q780342		MERCURY			< .00026	mg/L		

NICKEL ICP (CLP) ILM01

Analyst: M. JAO

Analysis Date: 10-SEP-93 Instrument: ICP

Test: M922.3.0

Reviewer: S. ENDERSEN

Review Date: 13-SEP-93 File ID:

Run: R196508

Prep: FAA OR ICP ACID DIGESTION OF AQUEOUS SAMPLES (CLP) ILM01

Prep: TOX CHAR LEACHING PROCEDURE (TCLP W/ ORGANICS) SW846-1311

QC Type	Identifier	Source	Parameter	True/Sampl	Spike Val	Observed	Units	% Rec	RPD
ICV01	Q779575	PERKIN ELM	NICKEL	0.400		0.408	mg/L	102	
SPI01	Q779599	A289027	NICKEL	0	0.500	0.532	mg/L	106	
DUP01	Q779600	A289027	NICKEL	0		BDL	mg/L		
DUP02	Q776735	A288944	NICKEL	0.0289		0.0284	mg/L		2
SPI02	Q776733	A288944	NICKEL	0.0289	0.500	0.491	mg/L	92	
	Q779673	INORGANIC	NICKEL	10		9.96	mg/L	100	
	Q779674	PERKIN ELM	NICKEL	1.00		0.868	mg/L	87	
CCV	Q779641	INORGANIC	NICKEL	5.00		4.89	mg/L	98	
BLA01	Q779642	NA	NICKEL			< 0.004	mg/L		
LCS	Q776731	SPEX	NICKEL	5.00		4.50	mg/L	90	
BLA02	Q776732	NA	NICKEL			< 0.004	mg/L		
SAMPLE	A288830		See Certificate of Analysis						
CCV	Q779670	INORGANIC	NICKEL	5.00		4.92	mg/L	98	
BLA01	Q779668	NA	NICKEL			< 0.004	mg/L		
CDL01	Q779616	PERKIN ELM	NICKEL	0.080		0.0867	mg/L	108	
ICS-A	Q779615	PERKIN ELM	NICKEL	1.00		0.897	mg/L	90	

TIN ICP SW846-6010A

Analyst: M. JAO

Analysis Date: 10-SEP-93 Instrument: ICP

Test: M135.3.0

Reviewer: S. ENDERSEN

Review Date: 13-SEP-93 File ID:

Run: R196508

Prep: FAA OR ICP ACID DIGESTION OF AQUEOUS SAMPLES (CLP) ILM01

Prep: TOX CHAR LEACHING PROCEDURE (TCLP W/ ORGANICS) SW846-1311

QC Type	Identifier	Source	Parameter	True/Sampl	Spike Val	Observed	Units	% Rec	RPD
DUP01	Q779600	A289027	TIN	0		BDL	mg/L		
DUP02	Q776735	A288944	TIN	0		BDL	mg/L		
SPI02	Q776733	A288944	TIN	0	2.00	1.92	mg/L	96	
CCV	Q779641	INORGANIC	TIN	5.00		4.87	mg/L	97	
BLA01	Q779642	NA	TIN			< 0.02	mg/L		
LCS	Q776731	SPEX	TIN	2.00		1.90	mg/L	95	
BLA02	Q776732	NA	TIN			< 0.02	mg/L		
	A288830		See Certificate of Analysis						
	Q779670	INORGANIC	TIN	5.00		4.89	mg/L	98	
.01	Q779668	NA	TIN			< 0.02	mg/L		

PROJECT RECORD

SILVER ICP (CLP) ILMO1

Analyst : M. JAO

Analysis Date: 10-SEP-93 Instrument: ICP

Test: M930.3.0

Reviewer: S. ENDERSEN

Review Date: 13-SEP-93 File ID:

Run: R196508

Prep: FAA OR ICP ACID DIGESTION OF AQUEOUS SAMPLES (CLP) ILMO1

Prep: TOX CHAR LEACHING PROCEDURE (TCLP W/ ORGANICS) SW846-1311

QC Type	Identifier	Source	Parameter	True/Sampl	Spike Val	Observed	Units	% Rec	RPD
ICV01	Q779576	PERKIN ELM	SILVER	2.00		1.97	mg/L	99	
SP101	Q779599	A289027	SILVER	0	0.050	0.0605	mg/L	121	
DUP01	Q779600	A289027	SILVER	0		BDL	mg/L		
DUP02	Q776735	A288944	SILVER	0		BDL	mg/L		
SP102	Q776733	A288944	SILVER	0	0.050	0.0547	mg/L	109	
CDL01	Q779673	INORGANIC	SILVER	2		2.00	mg/L	100	
ICS-A	Q779674	PERKIN ELM	SILVER	1.00		0.933	mg/L	93	
CCV	Q779641	INORGANIC	SILVER	1.00		0.990	mg/L	99	
BLA01	Q779642	NA	SILVER			< 0.004	mg/L		
LCS	Q776731	SPEX	SILVER	0.500		0.436	mg/L	87	
BLA02	Q776732	NA	SILVER			< 0.004	mg/L		
SAMPLE	A288830		See Certificate of Analysis						
CCV	Q779670	INORGANIC	SILVER	1.00		0.993	mg/L	99	
BLA01	Q779668	NA	SILVER			< 0.004	mg/L		
CDL01	Q779616	PERKIN ELM	SILVER	0.020		0.0201	mg/L	101	
ICS-A	Q779615	PERKIN ELM	SILVER	1.00		0.947	mg/L	95	

SELENIUM GFAA (CLP) ILMO1

Analyst : M. BAUER

Analysis Date: 13-SEP-93 Instrument: GFAA

Test: M928.2.0

Reviewer: S. O'NEAL

Review Date: 14-SEP-93 File ID: 026964

Run: R196623

Prep: GFAA ACID DIGESTION OF AQUEOUS SAMPLES (CLP) ILMO1

Prep: TOX CHAR LEACHING PROCEDURE (TCLP W/ ORGANICS) SW846-1311

QC Type	Identifier	Source	Parameter	True/Sampl	Spike Val	Observed	Units	% Rec	RPD
ICV01	Q780567		SELENIUM	.01		.0106	mg/L	106	
DUP02	Q776569	A288944	SELENIUM	.005		< .005	mg/L		0
SP102	Q776567	A288944	SELENIUM	0	.01	.0076	mg/L	76	
CDL01	Q780578		SELENIUM	.005		.0051	mg/L	102	
CCV	Q780579		SELENIUM	.02		.02	mg/L	100	
BLA01	Q780580		SELENIUM			< .002	mg/L		
LCS	Q776565		SELENIUM	.02		.0204	mg/L	102	
BLA02	Q776566		SELENIUM			< .002	mg/L		
SAMPLE	A288830		See Certificate of Analysis						
CDL01	Q780581		SELENIUM	.005		.006	mg/L	120	
CCV	Q780582		SELENIUM	.02		.0211	mg/L	105.5	
BLA01	Q780583		SELENIUM			< .002	mg/L		

VANADIUM ICP (CLP) ILMO1

Analyst : M. JAO

Analysis Date: 10-SEP-93 Instrument: ICP

Test: M938.3.0

Reviewer: S. ENDERSEN

Review Date: 13-SEP-93 File ID:

Run: R196508

Prep: FAA OR ICP ACID DIGESTION OF AQUEOUS SAMPLES (CLP) ILMO1

Prep: TOX CHAR LEACHING PROCEDURE (TCLP W/ ORGANICS) SW846-1311

QC Type	Identifier	Source	Parameter	True/Sampl	Spike Val	Observed	Units	% Rec	RPD
ICV01	Q779575	PERKIN ELM	VANADIUM	0.400		0.397	mg/L	99	
SP101	Q779599	A289027	VANADIUM	0	0.500	0.540	mg/L	108	
DUP01	Q779600	A289027	VANADIUM	0		BDL	mg/L		
DUP02	Q776735	A288944	VANADIUM	0		BDL	mg/L		
SP102	Q776733	A288944	VANADIUM	0	0.500	0.482	mg/L	96	
	Q779673	INORGANIC	VANADIUM	10		10.0	mg/L	100	
	Q779674	PERKIN ELM	VANADIUM	0.500		0.452	mg/L	90	
	Q779641	INORGANIC	VANADIUM	5.00		4.98	mg/L	100	
BLA01	Q779642	NA	VANADIUM			< 0.004	mg/L		
LCS	Q776731	SPEX	VANADIUM	2.00		4.56	mg/L	91	

PROJECT RECORD

QUALITY ASSURANCE REPORT

Service Location HERITAGE LABORATORIES, INC. 301 W. MORRIS ST. INDIANAPOLIS, IN 46231 (317)243-8305	Received	Lab ID
	27-SEP-93	A291099
	Complete	PO Number
	13-OCT-93	92005 *
	Printed	Sampled
	13-OCT-93	07-SEP-93

Sample Description

DESCRIPTION: ECC-04A1-PBM-02
 LOCATION: ECC - ZIONSVILLE

SULFIDE SW846-9030A		Analysis Date: 28-SEP-93		Test: G110.6.0					
Analyst: L. WILSON		Review Date: 28-SEP-93		Run: R198019					
Reviewer: B. SHRAKE		File ID: 1480-1482							
Prep: TOTAL AVAILABLE SULFIDE EXTRACTION SW 7.3.4.1									
QC Type	Identifier	Source	Parameter	True/Sampl	Spike Val	Observed	Units	% Rec	RPD
DUPO2	Q791042	D117815	SULFIDE	10		< 10	mg/kg		0
BLA01	Q791040		SULFIDE			.259	mg/L		
LCS	Q791044		SULFIDE	72.8		85.5	mg/L	117.4	
SAMPLE	A291099		See Certificate of Analysis						
LCS	Q791045		SULFIDE	72.8		81.7	mg/L	112.2	

POLYCHLORINATED BIPHENYLS (PCBS) SW846-8080		Analysis Date: 28-SEP-93		Instrument: GC/ECD		Test: 0301.2.0			
Analyst: L. WILLIAMS		Review Date: 28-SEP-93		File ID: 4412		Run: R197982			
Reviewer: L. JULIAN									
Prep: PCB SONICATION EXTRACTION SW846-3550									
QC Type	Identifier	Source	Parameter	True/Sampl	Spike Val	Observed	Units	% Rec	RPD
DUPO1	Q790741		PCB AROCHLOR 1248	.45		.415	mg/L	92.2	
ICV01	Q790741		PCB AROCHLOR 1260	.45		.493	mg/L	109.6	
DPS02	Q783695	A290125	PCB AROCHLOR 1260	0	8.81	9.3	mg/kg	105.6	8.8
SPI02	Q783694	A290125	PCB AROCHLOR 1260	0	8.97	8.67	mg/kg	96.7	
CCV	Q790744		PCB AROCHLOR 1248	.5		.499	mg/L	99.8	
CCV	Q790744		PCB AROCHLOR 1260	.5		.523	mg/L	104.6	
BLA02	Q783692	EMS	PCB AROCHLOR 1016			< .4	mg/kg		
BLA02	Q783692	EMS	PCB AROCHLOR 1221			< 2	mg/kg		
BLA02	Q783692	EMS	PCB AROCHLOR 1232			< .4	mg/kg		
BLA02	Q783692	EMS	PCB AROCHLOR 1242			< .4	mg/kg		
BLA02	Q783692	EMS	PCB AROCHLOR 1248			< .4	mg/kg		
BLA02	Q783692	EMS	PCB AROCHLOR 1254			< .4	mg/kg		
BLA02	Q783692	EMS	PCB AROCHLOR 1260			< .4	mg/kg		
LCS	Q783693		PCB AROCHLOR 1260	8.99		7.2	mg/kg	80.1	
SAMPLE	A291099		See Certificate of Analysis						

Notes

< Less Than Lower Detection Limit

PROJECT RECORD

Quality Assurance Officer: _____

CB Boyle

QUALITY ASSURANCE REPORT

Service Location RITAGE LABORATORIES, INC. 901 W. MORRIS ST. INDIANAPOLIS, IN 46231 (317)243-8305	Received 31-AUG-93	Lab ID A288944
	Complete 17-SEP-93	PO Number 92005 *
	Printed 23-SEP-93	Sampled 31-AUG-93 14:40

SAMPLE I.D.: ECC-04A1-PBM-03 DESCRIPTION: STYROFOAM LOCATION: ECC -ZIONSVILLE	Sample Description <h1>PROJECT RECORD</h1>
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CLP VOLATILE ORGANICS OLMO1 Analyst : G. WILSON Analysis Date: 07-SEP-93 Instrument: GC/MS VOA Test: 0902.2.0 Reviewer: A. BRADBURN Review Date: 08-SEP-93 File ID: >0532C Run: R196156 Prep: ZERO HEADSPACE EXTRACTION (TCLP) SW846-1311									
QC Type	Identifier	Source	Parameter	True/Sampl	Spike Val	Observed	Units	X Rec	RPD
SP101	Q777094	A288621	1,1-DICHLOROETHENE	0	50	48	ug/L	96	
SP101	Q777094	A288621	TRICHLOROETHENE	0	50	47	ug/L	94	
SP101	Q777094	A288621	BENZENE	0	50	51	ug/L	102	
SP101	Q777094	A288621	TOLUENE	0	50	47	ug/L	94	
SP101	Q777094	A288621	CHLOROBENZENE	0	50	50	ug/L	100	
DPS01	Q777095	A288621	1,1-DICHLOROETHENE	0	50	51	ug/L	102	6.1
DPS01	Q777095	A288621	TRICHLOROETHENE	0	50	47	ug/L	94	0
DPS01	Q777095	A288621	BENZENE	0	50	50	ug/L	100	2
	Q777095	A288621	TOLUENE	0	50	46	ug/L	92	2.2
	Q777095	A288621	CHLOROBENZENE	0	50	50	ug/L	100	0
	Q777112		See Attached Report x0520c.ind						
BLA01	Q777113		See Attached Report x0521c.ind						
SAMPLE	A288944		See Certificate of Analysis						

CLP SEMI-VOLATILE ORGANICS OLMO1 Analyst : A. BRADBURN Analysis Date: 14-SEP-93 Instrument: GC/MS SVOA Test: 0901.2.0 Reviewer: S. BROTHERTON Review Date: 17-SEP-93 File ID: >4472F Run: R196847 Prep: CLP SEMI-VOLATILE EXTRACTION OLMO1 Prep: TOX CHAR LEACHING PROCEDURE (TCLP W/ ORGANICS) SW846-1311									
QC Type	Identifier	Source	Parameter	True/Sampl	Spike Val	Observed	Units	X Rec	RPD
DPS02	Q777406	A288829	PHENOL	5	200	130	ug/L	62.5	8.3
DPS02	Q777406	A288829	2-CHLOROPHENOL	0	200	140	ug/L	70	0
DPS02	Q777406	A288829	1,4-DICHLOROBENZENE (P-DICHLOROBENZE	0	100	66	ug/L	66	14.1
DPS02	Q777406	A288829	N-NITROSO-DI-N-PROPYLAMINE	0	100	54	ug/L	54	35.1
DPS02	Q777406	A288829	1,2,4-TRICHLOROBENZENE	0	100	69	ug/L	69	14.8
DPS02	Q777406	A288829	4-CHLORO-3-METHYLPHENOL	0	200	110	ug/L	55	0
DPS02	Q777406	A288829	ACENAPHTHENE	0	100	66	ug/L	66	14.1
DPS02	Q777406	A288829	4-NITROPHENOL	0	200	120	ug/L	60	15.4
DPS02	Q777406	A288829	2,4-DINITROTOLUENE	0	100	62	ug/L	62	22.9
DPS02	Q777406	A288829	PENTACHLOROPHENOL	0	200	160	ug/L	80	17.1
DPS02	Q777406	A288829	PYRENE	0	100	73	ug/L	73	27.2
SP102	Q777405	A288829	PHENOL	5	200	120	ug/L	57.5	
SP102	Q777405	A288829	2-CHLOROPHENOL	0	200	140	ug/L	70	
SP102	Q777405	A288829	1,4-DICHLOROBENZENE (P-DICHLOROBENZE	0	100	76	ug/L	76	
	Q777405	A288829	N-NITROSO-DI-N-PROPYLAMINE	0	100	77	ug/L	77	
	Q777405	A288829	1,2,4-TRICHLOROBENZENE	0	100	80	ug/L	80	
SP102	Q777405	A288829	4-CHLORO-3-METHYLPHENOL	0	200	110	ug/L	55	
SP102	Q777405	A288829	ACENAPHTHENE	0	100	76	ug/L	76	
SP102	Q777405	A288829	4-NITROPHENOL	0	200	140	ug/L	70	

QC Type	Identifier	Source	Parameter	True/Sampl	Spike Val	Observed	Units	% Rec	RPD
SPI02	Q777405	A288829	2,4-DINITROTOLUENE	0	100	78	ug/L	78	
?	Q777405	A288829	PENTACHLOROPHENOL	0	200	190	ug/L	95	
?	Q777405	A288829	PYRENE	0	100	96	ug/L	96	
CCV	Q782234		See Attached Report g4465f.ind						
BLA02	Q782235		See Attached Report g4470f.ind						
SAMPLE	A288944		See Certificate of Analysis						

CLP SEMI-VOLATILE ORGANICS OLM01

Analyst : A. BRADBURN Analysis Date: 15-SEP-93 Instrument: GC/MS SVOA Test: 0901.2.1
 Reviewer: S. BROTHERTON Review Date: 17-SEP-93 File ID: >4483F Run: R197020
 Prep: CLP SEMI-VOLATILE EXTRACTION OLM01
 Prep: TOX CHAR LEACHING PROCEDURE (TCLP W/ ORGANICS) SW846-1311

QC Type	Identifier	Source	Parameter	True/Sampl	Spike Val	Observed	Units	% Rec	RPD
SPI02	Q777405	A288829	PHENOL	5	200	120	ug/L	57.5	
SPI02	Q777405	A288829	2-CHLOROPHENOL	0	200	140	ug/L	70	
SPI02	Q777405	A288829	1,4-DICHLORO BENZENE (P-DICHLORO BENZENE)	0	100	76	ug/L	76	
SPI02	Q777405	A288829	N-NITROSO-DI-N-PROPYLAMINE	0	100	77	ug/L	77	
SPI02	Q777405	A288829	1,2,4-TRICHLORO BENZENE	0	100	80	ug/L	80	
SPI02	Q777405	A288829	4-CHLORO-3-METHYLPHENOL	0	200	110	ug/L	55	
SPI02	Q777405	A288829	ACENAPHTHENE	0	100	76	ug/L	76	
SPI02	Q777405	A288829	4-NITROPHENOL	0	200	140	ug/L	70	
SPI02	Q777405	A288829	2,4-DINITROTOLUENE	0	100	78	ug/L	78	
SPI02	Q777405	A288829	PENTACHLOROPHENOL	0	200	190	ug/L	95	
SPI02	Q777405	A288829	PYRENE	0	100	96	ug/L	96	
DPS02	Q777406	A288829	PHENOL	5	200	130	ug/L	62.5	8.3
DPS02	Q777406	A288829	2-CHLOROPHENOL	0	200	140	ug/L	70	0
DPS02	Q777406	A288829	1,4-DICHLORO BENZENE (P-DICHLORO BENZENE)	0	100	66	ug/L	66	14.1
?	Q777406	A288829	N-NITROSO-DI-N-PROPYLAMINE	0	100	54	ug/L	54	35.1
?	Q777406	A288829	1,2,4-TRICHLORO BENZENE	0	100	69	ug/L	69	14.8
JPS02	Q777406	A288829	4-CHLORO-3-METHYLPHENOL	0	200	110	ug/L	55	0
DPS02	Q777406	A288829	ACENAPHTHENE	0	100	66	ug/L	66	14.1
DPS02	Q777406	A288829	4-NITROPHENOL	0	200	120	ug/L	60	15.4
DPS02	Q777406	A288829	2,4-DINITROTOLUENE	0	100	62	ug/L	62	22.9
DPS02	Q777406	A288829	PENTACHLOROPHENOL	0	200	160	ug/L	80	17.1
DPS02	Q777406	A288829	PYRENE	0	100	73	ug/L	73	27.2
CCV	Q783407		See Attached Report g4480f.ind						
BLA02	Q782235		See Attached Report g4470f.ind						
SAMPLE	A288944		See Certificate of Analysis						

ANTIMONY ICP (CLP) ILM01

Analyst : M. JAO Analysis Date: 10-SEP-93 Instrument: ICP Test: M902.3.0
 Reviewer: S. ENDERSEN Review Date: 13-SEP-93 File ID: Run: R196508
 Prep: FAA OR ICP ACID DIGESTION OF AQUEOUS SAMPLES (CLP) ILM01
 Prep: TOX CHAR LEACHING PROCEDURE (TCLP W/ ORGANICS) SW846-1311

QC Type	Identifier	Source	Parameter	True/Sampl	Spike Val	Observed	Units	% Rec	RPD
ICV01	Q779575	PERKIN ELM	ANTIMONY	0.400		0.398	mg/L	100	
DUP01	Q779600	A289027	ANTIMONY	0		BDL	mg/L		
DUP02	Q776735	A288944	ANTIMONY	0		BDL	mg/L		
SPI02	Q776733	A288944	ANTIMONY	0	0.500	0.533	mg/L	107	
CDL01	Q779675	PERKIN ELM	ANTIMONY	0.120		0.132	mg/L	110	
CCV	Q779641	INORGANIC	ANTIMONY	1.00		0.971	mg/L	97	
BLA01	Q779642	NA	ANTIMONY			< 0.012	mg/L		
?	Q776731	SPEX	ANTIMONY	5.00		4.94	mg/L	99	
?	Q776732	NA	ANTIMONY			< 0.012	mg/L		
SAMPLE	A288944		See Certificate of Analysis						
CCV	Q779670	INORGANIC	ANTIMONY	1.00		0.971	mg/L	97	
BLA01	Q779668	NA	ANTIMONY			< 0.012	mg/L		

PROJECT RECORD

QC Type	Identifier	Source	Parameter	True/Sampl	Spike Val	Observed	Units	X Rec	RPD
CDL01	Q779616	PERKIN ELM	ANTIMONY	0.120		0.127	ng/L	106	

ARSENIC GFAA (CLP) ILM01

Analyst : A. ROBERTSON Analysis Date: 10-SEP-93 Instrument: GFAA Test: M903.2.0
 Reviewer: S. O'NEAL Review Date: 13-SEP-93 File ID: 026951 Run: R196572
 Prep: GFAA ACID DIGESTION OF AQUEOUS SAMPLES (CLP) ILM01
 Prep: TOX CHAR LEACHING PROCEDURE (TCLP W/ ORGANICS) SW846-1311

QC Type	Identifier	Source	Parameter	True/Sampl	Spike Val	Observed	Units	X Rec	RPD
ICV01	Q780020		ARSENIC	.01		.0099	ng/L	99	
DUP02	Q776569	A288944	ARSENIC	.02		< .02	ng/L		0
SPI02	Q776567	A288944	ARSENIC	0	.04	.0312	ng/L	78	
CDL01	Q780038		ARSENIC	.01		.0104	ng/L	104	
CCV	Q780039		ARSENIC	.02		.0195	ng/L	97.5	
BLA01	Q780040		ARSENIC			< .002	ng/L		
LCS	Q776565		ARSENIC	.02		.0187	ng/L	93.5	
BLA02	Q776566		ARSENIC			< .002	ng/L		
SAMPLE	A288944		See Certificate of Analysis						
CDL01	Q780047		ARSENIC	.01		.0109	ng/L	109	
CCV	Q780048		ARSENIC	.02		.0201	ng/L	100.5	
BLA01	Q780049		ARSENIC			< .002	ng/L		

BARIUM ICP (CLP) ILM01

Analyst : M. JAO Analysis Date: 10-SEP-93 Instrument: ICP Test: M904.3.0
 Reviewer: S. ENDERSEN Review Date: 13-SEP-93 File ID: Run: R196508
 Prep: FAA OR ICP ACID DIGESTION OF AQUEOUS SAMPLES (CLP) ILM01
 Prep: TOX CHAR LEACHING PROCEDURE (TCLP W/ ORGANICS) SW846-1311

QC Type	Identifier	Source	Parameter	True/Sampl	Spike Val	Observed	Units	X Rec	RPD
1	Q779576	PERKIN ELM	BARIUM	2.00		1.98	ng/L	99	
101	Q779599	A289027	BARIUM	0	2.00	2.14	ng/L	107	
DUP01	Q779600	A289027	BARIUM	0		BDL	ng/L		
DUP02	Q776735	A288944	BARIUM	1.28		1.28	ng/L		0
SPI02	Q776733	A288944	BARIUM	1.28	2.00	3.16	ng/L	94	
CDL01	Q779673	INORGANIC	BARIUM	10		10.0	ng/L	100	
ICS-A	Q779674	PERKIN ELM	BARIUM	0.500		0.474	ng/L	95	
CCV	Q779641	INORGANIC	BARIUM	5.00		4.95	ng/L	99	
BLA01	Q779642	NA	BARIUM			< 0.004	ng/L		
LCS	Q776731	SPEX	BARIUM	20.0		18.3	ng/L	92	
BLA02	Q776732	NA	BARIUM			.0135	ng/L		
SAMPLE	A288944		See Certificate of Analysis						
CCV	Q779670	INORGANIC	BARIUM	5.00		4.98	ng/L	100	
BLA01	Q779668	NA	BARIUM			< 0.004	ng/L		
ICS-A	Q779615	PERKIN ELM	BARIUM	0.500		0.476	ng/L	95	

BERYLLIUM ICP (CLP) ILM01

Analyst : M. JAO Analysis Date: 13-SEP-93 Instrument: ICP Test: M905.3.0
 Reviewer: S. ENDERSEN Review Date: 14-SEP-93 File ID: Run: R196609
 Prep: FAA OR ICP ACID DIGESTION OF AQUEOUS SAMPLES (CLP) ILM01
 Prep: TOX CHAR LEACHING PROCEDURE (TCLP W/ ORGANICS) SW846-1311

QC Type	Identifier	Source	Parameter	True/Sampl	Spike Val	Observed	Units	X Rec	RPD
ICV01	Q780384	PERKIN ELM	BERYLLIUM	0.400		0.402	ng/L	101	
DUP02	Q776735	A288944	BERYLLIUM	0		BDL	ng/L		
SPI02	Q776733	A288944	BERYLLIUM	0	0.050	0.0434	ng/L	87	
1	Q780372	INORGANIC	BERYLLIUM	10		10.0	ng/L	100	
A	Q780362	PERKIN ELM	BERYLLIUM	0.500		0.474	ng/L	95	
.V	Q780518	INORGANIC	BERYLLIUM	5.00		5.02	ng/L	100	
BLA01	Q780516	NA	BERYLLIUM			< 0.002	ng/L		
LCS	Q776731	SPEX	BERYLLIUM	50.0		0.469	ng/L	94	

PROJECT RECORD

QC Type	Identifier	Source	Parameter	True/Sampl	Spike Val	Observed	Units	% Rec	RPD
BLA02	Q776732	NA	BERYLLIUM			< 0.002	ng/L		
LE	A288944		See Certificate of Analysis						
	Q780431	INORGANIC	BERYLLIUM	5.00		5.10	ng/L	102	
BLA01	Q780424	NA	BERYLLIUM			< 0.002	ng/L		
ICS-A	Q780525	PERKIN ELM	BERYLLIUM	0.500		0.476	ng/L	95	

CADMIUM ICP (CLP) ILM01
 Analyst : M. JAO Analysis Date: 10-SEP-93 Instrument: ICP Test: M908.3.0
 Reviewer: S. ENDERSEN Review Date: 13-SEP-93 File ID: Run: R196508
 Prep: FAA OR ICP ACID DIGESTION OF AQUEOUS SAMPLES (CLP) ILM01
 Prep: TOX CHAR LEACHING PROCEDURE (TCLP W/ ORGANICS) SW846-1311

QC Type	Identifier	Source	Parameter	True/Sampl	Spike Val	Observed	Units	% Rec	RPD
ICV01	Q779575	PERKIN ELM	CADMIUM	0.400		0.414	ng/L	104	
SP101	Q779599	A289027	CADMIUM	0	0.050	0.0559	ng/L	112	
DUP01	Q779600	A289027	CADMIUM	0		BDL	ng/L		
DUP02	Q776735	A288944	CADMIUM	0.0234		0.0249	ng/L		6
SP102	Q776733	A288944	CADMIUM	0.0234	0.050	0.0702	ng/L	94	
CDL01	Q779673	INORGANIC	CADMIUM	10		10.0	ng/L	100	
ICS-A	Q779674	PERKIN ELM	CADMIUM	1.00		0.893	ng/L	89	
CCV	Q779641	INORGANIC	CADMIUM	5.00		4.96	ng/L	99	
BLA01	Q779642	NA	CADMIUM			< 0.002	ng/L		
LCS	Q776731	SPEX	CADMIUM	0.500		0.474	ng/L	95	
BLA02	Q776732	NA	CADMIUM			< 0.002	ng/L		
SAMPLE	A288944		See Certificate of Analysis						
CCV	Q779670	INORGANIC	CADMIUM	5.00		4.98	ng/L	100	
BLA01	Q779668	NA	CADMIUM			.00511	ng/L		
SP101	Q779616	PERKIN ELM	CADMIUM	0.010		0.0136	ng/L	136	
A	Q779615	PERKIN ELM	CADMIUM	1.00		0.927	ng/L	93	

HEXAVALENT CHROMIUM SW846-7196A
 Analyst : S. PFEFFER Analysis Date: 15-SEP-93 Test: M110.6.0
 Reviewer: B. SHRAKE Review Date: 16-SEP-93 File ID: 2162, 2163 Run: R196865
 Prep: TOX CHAR LEACHING PROCEDURE (TCLP W/ ORGANICS) SW846-1311

QC Type	Identifier	Source	Parameter	True/Sampl	Spike Val	Observed	Units	% Rec	RPD
ICV01	Q782321		HEXAVALENT CHROMIUM	.178		.155	ng/L	87.1	
DUP01	Q782322	A288830	HEXAVALENT CHROMIUM	.05		< .05	ng/L		0
SP101	Q782323	A288944	HEXAVALENT CHROMIUM	0	.2	.122	ng/L	61	
DPS01	Q782324	A288944	HEXAVALENT CHROMIUM	0	.2	.124	ng/L	62	1.6
BLA01	Q782319		HEXAVALENT CHROMIUM			-.002	ng/L		
CDL01	Q782320		HEXAVALENT CHROMIUM	.05		.05	ng/L	100	
SAMPLE	A288944		See Certificate of Analysis						
CCV	Q782328		HEXAVALENT CHROMIUM	.2		.207	ng/L	103.5	

CHROMIUM ICP (CLP) ILM01
 Analyst : M. JAO Analysis Date: 10-SEP-93 Instrument: ICP Test: M910.3.0
 Reviewer: S. ENDERSEN Review Date: 13-SEP-93 File ID: Run: R196508
 Prep: FAA OR ICP ACID DIGESTION OF AQUEOUS SAMPLES (CLP) ILM01
 Prep: TOX CHAR LEACHING PROCEDURE (TCLP W/ ORGANICS) SW846-1311

QC Type	Identifier	Source	Parameter	True/Sampl	Spike Val	Observed	Units	% Rec	RPD
ICV01	Q779575	PERKIN ELM	CHROMIUM	0.400		0.401	ng/L	100	
SP101	Q779599	A289027	CHROMIUM	0	0.200	0.211	ng/L	106	
DUP01	Q779600	A289027	CHROMIUM	0		BDL	ng/L		
2	Q776735	A288944	CHROMIUM	0		BDL	ng/L		
.2	Q776733	A288944	CHROMIUM	0	0.200	0.197	ng/L	99	
CDL01	Q779673	INORGANIC	CHROMIUM	10		9.98	ng/L	100	
ICS-A	Q779674	PERKIN ELM	CHROMIUM	0.500		0.437	ng/L	87	
CCV	Q779641	INORGANIC	CHROMIUM	5.00		4.93	ng/L	99	

PROJECT RECORD

QC Type	Identifier	Source	Parameter	True/Sampl	Spike Val	Observed	Units	% Rec	RPD
BLA01	Q779642	NA	CHROMIUM			< 0.004	ng/L		
	Q776731	SPEX	CHROMIUM	2.00		1.83	ng/L	92	
	Q776732	NA	CHROMIUM			< 0.004	ng/L		
SAMPLE	A288944		See Certificate of Analysis						
CCV	Q779670	INORGANIC	CHROMIUM	5.00		4.96	ng/L	99	
BLA01	Q779668	NA	CHROMIUM			< 0.004	ng/L		
CDL01	Q779616	PERKIN ELM	CHROMIUM	0.020		0.0197	ng/L	99	
ICS-A	Q779615	PERKIN ELM	CHROMIUM	0.500		0.452	ng/L	90	

LEAD GFAA (CLP) ILM01

Analyst : J. WALLACE

Analysis Date: 10-SEP-93 Instrument: GFAA

Test: M916.2.0

Reviewer: S. O'NEAL

Review Date: 13-SEP-93 File ID: 026950

Run: R196571

Prep: GFAA ACID DIGESTION OF AQUEOUS SAMPLES (CLP) ILM01

Prep: TOX CHAR LEACHING PROCEDURE (TCLP W/ ORGANICS) SW846-1311

QC Type	Identifier	Source	Parameter	True/Sampl	Spike Val	Observed	Units	% Rec	RPD
ICV01	Q780015		LEAD	.01		.0106	ng/L	106	
DUP01	Q780070	A287207	LEAD	.005		< .005	ng/L		0
DUP02	Q776569	A288944	LEAD	.032		< .032	ng/L		0
SP102	Q776567	A288944	LEAD	.032	.02	.052	ng/L	100	
CCV	Q780017		LEAD	.02		.0214	ng/L	107	
BLA01	Q780018		LEAD			< .0012	ng/L		
CDL01	Q780019		LEAD	.003		.0034	ng/L	113.3	
LCS	Q776565		LEAD	.02		.022	ng/L	110	
BLA02	Q776566		LEAD			< .0012	ng/L		
SAMPLE	A288944		See Certificate of Analysis						
CDL01	Q780025		LEAD	.003		.0033	ng/L	110	
CCV	Q780026		LEAD	.02		.0219	ng/L	109.5	
1	Q780027		LEAD			< .0012	ng/L		

MANGANESE ICP (CLP) ILM01

Analyst : M. JAO

Analysis Date: 10-SEP-93 Instrument: ICP

Test: M919.3.0

Reviewer: S. ENDERSEN

Review Date: 13-SEP-93 File ID:

Run: R196508

Prep: FAA OR ICP ACID DIGESTION OF AQUEOUS SAMPLES (CLP) ILM01

Prep: TOX CHAR LEACHING PROCEDURE (TCLP W/ ORGANICS) SW846-1311

QC Type	Identifier	Source	Parameter	True/Sampl	Spike Val	Observed	Units	% Rec	RPD
ICV01	Q779575	PERKIN ELM	MANGANESE	0.400		0.403	ng/L	101	
SP101	Q779599	A289027	MANGANESE	0	0.500	0.543	ng/L	109	
DUP01	Q779600	A289027	MANGANESE	0		BDL	ng/L		
DUP02	Q776735	A288944	MANGANESE	0.565		0.552	ng/L		2
SP102	Q776733	A288944	MANGANESE	0.565	0.500	1.00	ng/L	87	
CDL01	Q779673	INORGANIC	MANGANESE	10		9.96	ng/L	100	
ICS-A	Q779674	PERKIN ELM	MANGANESE	0.500		0.456	ng/L	91	
CCV	Q779641	INORGANIC	MANGANESE	5.00		4.91	ng/L	98	
BLA01	Q779642	NA	MANGANESE			< 0.004	ng/L		
LCS	Q776731	SPEX	MANGANESE	5.00		4.50	ng/L	90	
BLA02	Q776732	NA	MANGANESE			< 0.004	ng/L		
SAMPLE	A288944		See Certificate of Analysis						
CCV	Q779670	INORGANIC	MANGANESE	5.00		4.94	ng/L	99	
BLA01	Q779668	NA	MANGANESE			< 0.004	ng/L		
CDL01	Q779616	PERKIN ELM	MANGANESE	0.030		0.0310	ng/L	103	
ICS-A	Q779615	PERKIN ELM	MANGANESE	0.500		0.470	ng/L	94	

MERCURY CVAA (CLP) ILM01

Analyst : G. MAPP

Analysis Date: 10-SEP-93 Instrument: CVAA

Test: M920.2.0

viewer: R. BYERS

Review Date: 13-SEP-93 File ID: 026958

Run: R196597

Prep: MERCURY CVAA ACID DIGESTION OF AQUEOUS SAMPLES (CLP) ILM01

Prep: TOX CHAR LEACHING PROCEDURE (TCLP W/ ORGANICS) SW846-1311

QC Type	Identifier	Source	Parameter	True/Sampl	Spike Val	Observed	Units	% Rec	RPD
ICV01	Q780253		MERCURY	.002		.00195	mg/L	97.5	
DUP02	Q776579	A288830	MERCURY	.0005		< .0005	mg/L		0
SPI02	Q776577	A288830	MERCURY	0	.001	.00111	mg/L	111	
CCV	Q780339		MERCURY	.003		.00268	mg/L	89.3	
BLA01	Q780340		MERCURY			< .0002	mg/L		
LCS	Q776575		MERCURY	.003		.00292	mg/L	97.3	
BLA02	Q776576		MERCURY			< .0002	mg/L		
SAMPLE	A288944		See Certificate of Analysis						
CCV	Q780341		MERCURY	.003		.00268	mg/L	89.3	
BLA01	Q780342		MERCURY			< .00026	mg/L		

NICKEL ICP (CLP) ILM01

Analyst : M. JAO

Analysis Date: 10-SEP-93 Instrument: ICP

Test: M922.3.0

Reviewer: S. ENDERSEN

Review Date: 13-SEP-93 File ID:

Run: R196508

Prep: FAA OR ICP ACID DIGESTION OF AQUEOUS SAMPLES (CLP) ILM01

Prep: TOX CHAR LEACHING PROCEDURE (TCLP W/ ORGANICS) SW846-1311

QC Type	Identifier	Source	Parameter	True/Sampl	Spike Val	Observed	Units	% Rec	RPD
ICV01	Q779575	PERKIN ELM	NICKEL	0.400		0.408	mg/L	102	
SPI01	Q779599	A289027	NICKEL	0	0.500	0.532	mg/L	106	
DUP01	Q779600	A289027	NICKEL	0		BDL	mg/L		
DUP02	Q776735	A288944	NICKEL	0.0289		0.0284	mg/L		2
SPI02	Q776733	A288944	NICKEL	0.0289	0.500	0.491	mg/L	92	
	Q779673	INORGANIC	NICKEL	10		9.96	mg/L	100	
	Q779674	PERKIN ELM	NICKEL	1.00		0.868	mg/L	87	
CCV	Q779641	INORGANIC	NICKEL	5.00		4.89	mg/L	98	
BLA01	Q779642	NA	NICKEL			< 0.004	mg/L		
LCS	Q776731	SPEX	NICKEL	5.00		4.50	mg/L	90	
BLA02	Q776732	NA	NICKEL			< 0.004	mg/L		
SAMPLE	A288944		See Certificate of Analysis						
CCV	Q779670	INORGANIC	NICKEL	5.00		4.92	mg/L	98	
BLA01	Q779668	NA	NICKEL			< 0.004	mg/L		
CDL01	Q779616	PERKIN ELM	NICKEL	0.080		0.0867	mg/L	108	
ICS-A	Q779615	PERKIN ELM	NICKEL	1.00		0.897	mg/L	90	

TIN ICP SW846-6010A

Analyst : M. JAO

Analysis Date: 10-SEP-93 Instrument: ICP

Test: M135.3.0

Reviewer: S. ENDERSEN

Review Date: 13-SEP-93 File ID:

Run: R196508

Prep: FAA OR ICP ACID DIGESTION OF AQUEOUS SAMPLES (CLP) ILM01

Prep: TOX CHAR LEACHING PROCEDURE (TCLP W/ ORGANICS) SW846-1311

QC Type	Identifier	Source	Parameter	True/Sampl	Spike Val	Observed	Units	% Rec	RPD
DUP01	Q779600	A289027	TIN	0		BDL	mg/L		
DUP02	Q776735	A288944	TIN	0		BDL	mg/L		
SPI02	Q776733	A288944	TIN	0	2.00	1.92	mg/L	96	
CCV	Q779641	INORGANIC	TIN	5.00		4.87	mg/L	97	
BLA01	Q779642	NA	TIN			< 0.02	mg/L		
LCS	Q776731	SPEX	TIN	2.00		1.90	mg/L	95	
BLA02	Q776732	NA	TIN			< 0.02	mg/L		
SAMPLE	A288944		See Certificate of Analysis						
	Q779670	INORGANIC	TIN	5.00		4.89	mg/L	98	
BLA01	Q779668	NA	TIN			< 0.02	mg/L		

SILVER ICP (CLP) ILM01

Analyst : M. JAO

Analysis Date: 10-SEP-93 Instrument: ICP

Test: M930.3.0

Reviewer: S. ENDERSEN

Review Date: 13-SEP-93 File ID:

Run: R196508

Prep: FAA OR ICP ACID DIGESTION OF AQUEOUS SAMPLES (CLP) ILM01

Prep: TOX CHAR LEACHING PROCEDURE (TCLP W/ ORGANICS) SW846-1311

QC Type	Identifier	Source	Parameter	True/Sampl	Spike Val	Observed	Units	X Rec	RPD
ICV01	Q779576	PERKIN ELM	SILVER	2.00		1.97	mg/L	99	
SP101	Q779599	A289027	SILVER	0	0.050	0.0605	mg/L	121	
DUP01	Q779600	A289027	SILVER	0		BDL	mg/L		
DUP02	Q776735	A288944	SILVER	0		BDL	mg/L		
SP102	Q776733	A288944	SILVER	0	0.050	0.0547	mg/L	109	
CDL01	Q779673	INORGANIC	SILVER	2		2.00	mg/L	100	
ICS-A	Q779674	PERKIN ELM	SILVER	1.00		0.933	mg/L	93	
CCV	Q779641	INORGANIC	SILVER	1.00		0.990	mg/L	99	
BLA01	Q779642	NA	SILVER			< 0.004	mg/L		
LCS	Q776731	SPEX	SILVER	0.500		0.436	mg/L	87	
BLA02	Q776732	NA	SILVER			< 0.004	mg/L		
SAMPLE	A288944		See Certificate of Analysis						
CCV	Q779670	INORGANIC	SILVER	1.00		0.993	mg/L	99	
BLA01	Q779668	NA	SILVER			< 0.004	mg/L		
CDL01	Q779616	PERKIN ELM	SILVER	0.020		0.0201	mg/L	101	
ICS-A	Q779615	PERKIN ELM	SILVER	1.00		0.947	mg/L	95	

SELENIUM GFAA (CLP) ILM01

Analyst : M. BAUER

Analysis Date: 13-SEP-93 Instrument: GFAA

Test: M928.2.0

Reviewer: S. O'NEAL

Review Date: 14-SEP-93 File ID: 026964

Run: R196623

Prep: GFAA ACID DIGESTION OF AQUEOUS SAMPLES (CLP) ILM01

Prep: TOX CHAR LEACHING PROCEDURE (TCLP W/ ORGANICS) SW846-1311

QC Type	Identifier	Source	Parameter	True/Sampl	Spike Val	Observed	Units	X Rec	RPD
ICV01	Q780567		SELENIUM	.01		.0106	mg/L	106	
DUP02	Q776569	A288944	SELENIUM	.005		< .005	mg/L		0
SP102	Q776567	A288944	SELENIUM	0	.01	.0076	mg/L	76	
CDL01	Q780572		SELENIUM	.005		.0053	mg/L	106	
CCV	Q780573		SELENIUM	.02		.0195	mg/L	97.5	
BLA01	Q780574		SELENIUM			< .002	mg/L		
LCS	Q776565		SELENIUM	.02		.0204	mg/L	102	
BLA02	Q776566		SELENIUM			< .002	mg/L		
SAMPLE	A288944		See Certificate of Analysis						
CDL01	Q780575		SELENIUM	.005		.0058	mg/L	116	
CCV	Q780576		SELENIUM	.02		.0197	mg/L	98.5	
BLA01	Q780577		SELENIUM			< .002	mg/L		

VANADIUM ICP (CLP) ILM01

Analyst : M. JAO

Analysis Date: 10-SEP-93 Instrument: ICP

Test: M938.3.0

Reviewer: S. ENDERSEN

Review Date: 13-SEP-93 File ID:

Run: R196508

Prep: FAA OR ICP ACID DIGESTION OF AQUEOUS SAMPLES (CLP) ILM01

Prep: TOX CHAR LEACHING PROCEDURE (TCLP W/ ORGANICS) SW846-1311

QC Type	Identifier	Source	Parameter	True/Sampl	Spike Val	Observed	Units	X Rec	RPD
ICV01	Q779575	PERKIN ELM	VANADIUM	0.400		0.397	mg/L	99	
SP101	Q779599	A289027	VANADIUM	0	0.500	0.540	mg/L	108	
DUP01	Q779600	A289027	VANADIUM	0		BDL	mg/L		
DUP02	Q776735	A288944	VANADIUM	0		BDL	mg/L		
SP102	Q776733	A288944	VANADIUM	0	0.500	0.482	mg/L	96	
IN	Q779673	INORGANIC	VANADIUM	10		10.0	mg/L	100	
A	Q779674	PERKIN ELM	VANADIUM	0.500		0.452	mg/L	90	
.V	Q779641	INORGANIC	VANADIUM	5.00		4.98	mg/L	100	
BLA01	Q779642	NA	VANADIUM			< 0.004	mg/L		
LCS	Q776731	SPEX	VANADIUM	5.00		4.56	mg/L	91	

PROJECT RECORD

QC Type	Identifier	Source	Parameter	True/Sampl	Spike Val	Observed	Units	% Rec	RPD
BLA02	Q776732	NA	VANADIUM			< 0.004	mg/L		
LE	A288944		See Certificate of Analysis						
	Q779670	INORGANIC	VANADIUM	5.00		5.01	mg/L	100	
LA01	Q779668	NA	VANADIUM			< 0.004	mg/L		
CDL01	Q779616	PERKIN ELM	VANADIUM	0.100		0.102	mg/L	102	
ICS-A	Q779615	PERKIN ELM	VANADIUM	0.500		0.465	mg/L	93	

ZINC ICP (CLP) ILM01

Analyst: M. JAO Analysis Date: 10-SEP-93 Instrument: ICP Test: M939.3.0
 Reviewer: S. ENDERSEN Review Date: 13-SEP-93 File ID: Run: R196508
 Prep: FAA OR ICP ACID DIGESTION OF AQUEOUS SAMPLES (CLP) ILM01
 Prep: TOX CHAR LEACHING PROCEDURE (TCLP W/ ORGANICS) SW846-1311

QC Type	Identifier	Source	Parameter	True/Sampl	Spike Val	Observed	Units	% Rec	RPD
ICV01	Q779575	PERKIN ELM	ZINC	0.400		0.424	mg/L	106	
SP101	Q779599	A289027	ZINC	0	0.500	0.563	mg/L	113	
DUP01	Q779600	A289027	ZINC	0		BDL	mg/L		
DUP02	Q776735	A288944	ZINC	4.44		4.30	mg/L		3
CDL01	Q779673	INORGANIC	ZINC	10		9.93	mg/L	99	
ICS-A	Q779674	PERKIN ELM	ZINC	1.00		0.960	mg/L	96	
CCV	Q779641	INORGANIC	ZINC	5.00		5.00	mg/L	100	
BLA01	Q779642	NA	ZINC			< 0.008	mg/L		
LCS	Q776731	SPEX	ZINC	5.00		4.60	mg/L	92	
BLA02	Q776732	NA	ZINC			.0357	mg/L		
SAMPLE	A288944		See Certificate of Analysis						
CCV	Q779670	INORGANIC	ZINC	5.00		5.05	mg/L	101	
BLA01	Q779668	NA	ZINC			< 0.008	mg/L		
CDL01	Q779616	PERKIN ELM	ZINC	0.040		0.0496	mg/L	124	
	Q779615	PERKIN ELM	ZINC	1.00		0.968	mg/L	97	

CYANIDE, TOTAL (AUTOMATED) (CLP) ILM01

Analyst: J. WILDER Analysis Date: 10-SEP-93 Instrument: AUTO-ANALYZER Test: G901.4.0
 Reviewer: B. SHRAKE Review Date: 14-SEP-93 File ID: 1036 Run: R196627
 Prep: CYANIDE DISTILLATION (CLP) ILM01
 Prep: NEUTRAL WATER LEACHING METHOD (SW846-1310 MODIFIED) SW846-1310(MOD)

QC Type	Identifier	Source	Parameter	True/Sampl	Spike Val	Observed	Units	% Rec	RPD
ICV01	Q780624		CYANIDE	.205		.183	mg/L	89.3	
ICV01	Q780665		CYANIDE	.205		.18	mg/L	87.8	
ICV01	Q780687		CYANIDE	.205		.168	mg/L	82	
ICV01	Q780689		CYANIDE	.205		.172	mg/L	83.9	
DUP02	Q780649	A288830	CYANIDE	.005		< .005	mg/L		0
SP102	Q780650	A288944	CYANIDE	0	.06	.062	mg/L	103.3	
CDL01	Q780623		CYANIDE	.01		.01	mg/L	100	
CCV	Q780643		CYANIDE	.1		.115	mg/L	115	
BLA01	Q780644		CYANIDE			0	mg/L		
BLA02	Q780651		CYANIDE			0	mg/L		
LCS	Q780652		CYANIDE	.3		.31	mg/L	103.3	
SAMPLE	A288944		See Certificate of Analysis						
CCV	Q780655		CYANIDE	.1		.112	mg/L	112	
BLA01	Q780656		CYANIDE			0	mg/L		
BLA02	Q780668		CYANIDE			0	mg/L		
LCS	Q780658		CYANIDE	.3		.296	mg/L	98.7	

Notes

Below Detection Limit
 Less Than Lower Detection Limit

PROJECT RECORD

Quality Assurance Officer: _____

CB Boyle

QUALITY ASSURANCE REPORT

Service Location ERITAGE LABORATORIES, INC. 301 W. MORRIS ST. INDIANAPOLIS, IN 46231 (317)243-8305	Received	Lab ID
	27-SEP-93	A291098
	Complete	PO Number
	12-OCT-93	92005 *
	Printed	Sampled
	13-OCT-93	07-SEP-93

Sample Description

DESCRIPTION: ECC-04A1-PBM-03
 LOCATION: ECC - ZIONSVILLE

SULFIDE SW846-9030A		Analysis Date: 28-SEP-93		Test: G110.4.0					
Analyst: L. WILSON		Review Date: 28-SEP-93		File ID: 1480-1482					
Reviewer: B. SHRAKE		Prep: TOTAL AVAILABLE SULFIDE EXTRACTION SW 7.3.4.1		Run: R198019					
QC Type	Identifier	Source	Parameter	True/Sampl	Spike Val	Observed	Units	% Rec	RPD
DUP02	Q791042	D117815	SULFIDE	10		< 10	mg/kg		0
BLA01	Q791040		SULFIDE			.259	mg/L		
LCS	Q791044		SULFIDE	72.8		85.5	mg/L	117.4	
SAMPLE	A291098		See Certificate of Analysis						
LCS	Q791045		SULFIDE	72.8		81.7	mg/L	112.2	

POLYCHLORINATED BIPHENYLS (PCBS) SW846-8080		Analysis Date: 28-SEP-93		Instrument: GC/ECD		Test: Q301.2.0			
Analyst: L. WILLIAMS		Review Date: 28-SEP-93		File ID: 4412		Run: R197982			
Reviewer: L. JULIAN		Prep: PCB SONICATION EXTRACTION SW846-3550							
QC Type	Identifier	Source	Parameter	True/Sampl	Spike Val	Observed	Units	% Rec	RPD
V01	Q790741		PCB AROCHLOR 1248	.45		.415	mg/L	92.2	
ICV01	Q790741		PCB AROCHLOR 1260	.45		.493	mg/L	109.6	
DPS02	Q783695	A290125	PCB AROCHLOR 1260	0	8.81	9.3	mg/kg	105.6	8.8
SP102	Q783694	A290125	PCB AROCHLOR 1260	0	8.97	8.67	mg/kg	96.7	
CCV	Q790744		PCB AROCHLOR 1248	.5		.499	mg/L	99.8	
CCV	Q790744		PCB AROCHLOR 1260	.5		.523	mg/L	104.6	
BLA02	Q783692	EMS	PCB AROCHLOR 1016			< .4	mg/kg		
BLA02	Q783692	EMS	PCB AROCHLOR 1221			< 2	mg/kg		
BLA02	Q783692	EMS	PCB AROCHLOR 1232			< .4	mg/kg		
BLA02	Q783692	EMS	PCB AROCHLOR 1242			< .4	mg/kg		
BLA02	Q783692	EMS	PCB AROCHLOR 1248			< .4	mg/kg		
BLA02	Q783692	EMS	PCB AROCHLOR 1254			< .4	mg/kg		
BLA02	Q783692	EMS	PCB AROCHLOR 1260			< .4	mg/kg		
LCS	Q783693		PCB AROCHLOR 1260	8.99		7.2	mg/kg	80.1	
SAMPLE	A291098		See Certificate of Analysis						

Notes

< Less Than Lower Detection Limit

PROJECT RECORD

Quality Assurance Officer: _____

CB Boyle

QUALITY ASSURANCE REPORT

Service Location TRITAGE LABORATORIES, INC. 901 W. MORRIS ST. INDIANAPOLIS, IN 46231 (317)243-8305	Received	Lab ID
	31-AUG-93	A288945
	Complete	PO Number
	17-SEP-93	92005 *
	Printed	Sampled
	23-SEP-93	31-AUG-93 14:15

SAMPLE I.D.: ECC-04A1-PBM-04 DESCRIPTION: WOOD LOCATION: ECC -ZIONSVILLE	Sample Description <h2 style="margin: 0;">PROJECT RECORD</h2>
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CLP VOLATILE ORGANICS OLMO1 Analyst : G. WILSON Analysis Date: 07-SEP-93 Instrument: GC/MS VOA Test: 0902.2.0 Reviewer: A. BRADBURN Review Date: 08-SEP-93 File ID: >0533C Run: R196156 Prep: ZERO HEADSPACE EXTRACTION (TCLP) SW846-1311									
GC Type	Identifier	Source	Parameter	True/Sampl	Spike Val	Observed	Units	% Rec	RPD
SP101	Q777094	A288621	1,1-DICHLOROETHENE	0	50	48	ug/L	96	
SP101	Q777094	A288621	TRICHLOROETHENE	0	50	47	ug/L	94	
SP101	Q777094	A288621	BENZENE	0	50	51	ug/L	102	
SP101	Q777094	A288621	TOLUENE	0	50	47	ug/L	94	
SP101	Q777094	A288621	CHLOROBENZENE	0	50	50	ug/L	100	
DPS01	Q777095	A288621	1,1-DICHLOROETHENE	0	50	51	ug/L	102	6.1
DPS01	Q777095	A288621	TRICHLOROETHENE	0	50	47	ug/L	94	0
DPS01	Q777095	A288621	BENZENE	0	50	50	ug/L	100	2
?	Q777095	A288621	TOLUENE	0	50	46	ug/L	92	2.2
?	Q777095	A288621	CHLOROBENZENE	0	50	50	ug/L	100	0
..V	Q777112		See Attached Report x0520c.ind						
BLA01	Q777113		See Attached Report x0521c.ind						
SAMPLE	A288945		See Certificate of Analysis						

CLP SEMI-VOLATILE ORGANICS OLMO1 Analyst : A. BRADBURN Analysis Date: 14-SEP-93 Instrument: GC/MS SVDA Test: 0901.2.0 Reviewer: S. BROTHERTON Review Date: 17-SEP-93 File ID: >4473F Run: R196847 Prep: CLP SEMI-VOLATILE EXTRACTION OLMO1 Prep: TOX CHAR LEACHING PROCEDURE (TCLP W/ ORGANICS) SW846-1311									
GC Type	Identifier	Source	Parameter	True/Sampl	Spike Val	Observed	Units	% Rec	RPD
DPS02	Q777406	A288829	PHENOL	5	200	130	ug/L	62.5	8.3
DPS02	Q777406	A288829	2-CHLOROPHENOL	0	200	140	ug/L	70	0
DPS02	Q777406	A288829	1,4-DICHLOROBENZENE (P-DICHLOROBENZE	0	100	66	ug/L	66	14.1
DPS02	Q777406	A288829	N-NITROSO-DI-N-PROPYLAMINE	0	100	54	ug/L	54	35.1
DPS02	Q777406	A288829	1,2,4-TRICHLOROBENZENE	0	100	69	ug/L	69	14.8
DPS02	Q777406	A288829	4-CHLORO-3-METHYLPHENOL	0	200	110	ug/L	55	0
DPS02	Q777406	A288829	ACENAPHTHENE	0	100	66	ug/L	66	14.1
DPS02	Q777406	A288829	4-NITROPHENOL	0	200	120	ug/L	60	15.4
DPS02	Q777406	A288829	2,4-DINITROTOLUENE	0	100	62	ug/L	62	22.9
DPS02	Q777406	A288829	PENTACHLOROPHENOL	0	200	160	ug/L	80	17.1
DPS02	Q777406	A288829	PYRENE	0	100	73	ug/L	73	27.2
SP102	Q777405	A288829	PHENOL	5	200	120	ug/L	57.5	
SP102	Q777405	A288829	2-CHLOROPHENOL	0	200	140	ug/L	70	
SP102	Q777405	A288829	1,4-DICHLOROBENZENE (P-DICHLOROBENZE	0	100	76	ug/L	76	
?	Q777405	A288829	N-NITROSO-DI-N-PROPYLAMINE	0	100	77	ug/L	77	
..J	Q777405	A288829	1,2,4-TRICHLOROBENZENE	0	100	80	ug/L	80	
SP102	Q777405	A288829	4-CHLORO-3-METHYLPHENOL	0	200	110	ug/L	55	
SP102	Q777405	A288829	ACENAPHTHENE	0	100	76	ug/L	76	
SP102	Q777405	A288829	4-NITROPHENOL	0	200	140	ug/L	70	

QC Type	Identifier	Source	Parameter	True/Sampl	Spike Val	Observed	Units	% Rec	RPD
SPI02	Q777405	A288829	2,4-DINITROTOLUENE	0	100	78	ug/L	78	
?	Q777405	A288829	PENTACHLOROPHENOL	0	200	190	ug/L	95	
?	Q777405	A288829	PYRENE	0	100	96	ug/L	96	
CV	Q782234		See Attached Report g4465f.ind						
BLA02	Q782235		See Attached Report g4470f.ind						
SAMPLE	A288945		See Certificate of Analysis						

CLP SEMI-VOLATILE ORGANICS OLM01

Analyst : A. BRADBURN Analysis Date: 15-SEP-93 Instrument: GC/MS SVOA Test: 0901.2.1
 Reviewer: S. BROTHERTON Review Date: 17-SEP-93 File ID: >4485F Run: R197020
 Prep: CLP SEMI-VOLATILE EXTRACTION OLM01
 Prep: TOX CHAR LEACHING PROCEDURE (TCLP W/ ORGANICS) SW846-1311

QC Type	Identifier	Source	Parameter	True/Sampl	Spike Val	Observed	Units	% Rec	RPD
SPI02	Q777405	A288829	PHENOL	5	200	120	ug/L	57.5	
SPI02	Q777405	A288829	2-CHLOROPHENOL	0	200	140	ug/L	70	
SPI02	Q777405	A288829	1,4-DICHLOROBENZENE (P-DICHLOROBENZE	0	100	76	ug/L	76	
SPI02	Q777405	A288829	N-NITROSO-DI-N-PROPYLAMINE	0	100	77	ug/L	77	
SPI02	Q777405	A288829	1,2,4-TRICHLOROBENZENE	0	100	80	ug/L	80	
SPI02	Q777405	A288829	4-CHLORO-3-METHYLPHENOL	0	200	110	ug/L	55	
SPI02	Q777405	A288829	ACENAPHTHENE	0	100	76	ug/L	76	
SPI02	Q777405	A288829	4-NITROPHENOL	0	200	140	ug/L	70	
SPI02	Q777405	A288829	2,4-DINITROTOLUENE	0	100	78	ug/L	78	
SPI02	Q777405	A288829	PENTACHLOROPHENOL	0	200	190	ug/L	95	
SPI02	Q777405	A288829	PYRENE	0	100	96	ug/L	96	
DPS02	Q777406	A288829	PHENOL	5	200	130	ug/L	62.5	8.3
DPS02	Q777406	A288829	2-CHLOROPHENOL	0	200	140	ug/L	70	0
DPS02	Q777406	A288829	1,4-DICHLOROBENZENE (P-DICHLOROBENZE	0	100	66	ug/L	66	14.1
?	Q777406	A288829	N-NITROSO-DI-N-PROPYLAMINE	0	100	54	ug/L	54	35.1
?	Q777406	A288829	1,2,4-TRICHLOROBENZENE	0	100	69	ug/L	69	14.8
DPS02	Q777406	A288829	4-CHLORO-3-METHYLPHENOL	0	200	110	ug/L	55	0
DPS02	Q777406	A288829	ACENAPHTHENE	0	100	66	ug/L	66	14.1
DPS02	Q777406	A288829	4-NITROPHENOL	0	200	120	ug/L	60	15.4
DPS02	Q777406	A288829	2,4-DINITROTOLUENE	0	100	62	ug/L	62	22.9
DPS02	Q777406	A288829	PENTACHLOROPHENOL	0	200	160	ug/L	80	17.1
DPS02	Q777406	A288829	PYRENE	0	100	73	ug/L	73	27.2
CCV	Q783407		See Attached Report g4480f.ind						
BLA02	Q782235		See Attached Report g4470f.ind						
SAMPLE	A288945		See Certificate of Analysis						

ANTIMONY ICP (CLP) ILM01

Analyst : M. JAO Analysis Date: 07-SEP-93 Instrument: ICP Test: M902.3.0
 Reviewer: S. ENDERSEN Review Date: 08-SEP-93 File ID: Run: R196048
 Prep: FAA OR ICP ACID DIGESTION OF AQUEOUS SAMPLES (CLP) ILM01
 Prep: TOX CHAR LEACHING PROCEDURE (TCLP W/ ORGANICS) SW846-1311

QC Type	Identifier	Source	Parameter	True/Sampl	Spike Val	Observed	Units	% Rec	RPD
ICV01	Q776664	PERKIN ELM	ANTIMONY	0.400		0.400	mg/L	100	
DUP02	Q773991	A288829	ANTIMONY	0		BDL	mg/L		
SPI02	Q773989	A288829	ANTIMONY	0	0.500	0.496	mg/L	99	
CDL01	Q776642	PERKIN ELM	ANTIMONY	0.120		0.125	mg/L	104	
CCV	Q776492	INORGANIC	ANTIMONY	1.00		1.04	mg/L	104	
BLA01	Q776486	NA	ANTIMONY			< 0.012	mg/L		
LCS	Q773987	SPEX	ANTIMONY	5.00		4.90	mg/L	98	
?	Q773988	NA	ANTIMONY			< 0.012	mg/L		
?	A288945		See Certificate of Analysis						
CV	Q776377	INORGANIC	ANTIMONY	1.00		1.02	mg/L	102	
BLA01	Q776371	NA	ANTIMONY			< 0.012	mg/L		
CDL01	Q776706	PERKIN ELM	ANTIMONY	0.120		0.134	mg/L	112	

ARSENIC GFAA (CLP) ILMO1

Analyst : A. ROBERTSON

Analysis Date: 07-SEP-93 Instrument: GFAA

Test: M903.2.0

Viewer: S. O'NEAL

Review Date: 08-SEP-93 File ID: 026936

Run: R196195

Prep: GFAA ACID DIGESTION OF AQUEOUS SAMPLES (CLP) ILMO1

Prep: TOX CHAR LEACHING PROCEDURE (TCLP W/ ORGANICS) SW846-1311

QC Type	Identifier	Source	Parameter	True/Sampl	Spike Val	Observed	Units	% Rec	RPD
ICV01	Q777328		ARSENIC	.01		.0103	mg/L	103	
DUP02	Q773986	A288829	ARSENIC	.002		< .002	mg/L		0
SP102	Q773984	A288829	ARSENIC	0	.04	.0343	mg/L	85.8	
CDL01	Q777339		ARSENIC	.01		.0091	mg/L	91	
CCV	Q777340		ARSENIC	.02		.0183	mg/L	91.5	
BLA01	Q777341		ARSENIC			< .0008	mg/L		
LCS	Q773982		ARSENIC	.02		.0196	mg/L	98	
BLA02	Q773983		ARSENIC			< .0008	mg/L		
SAMPLE	A288945		See Certificate of Analysis						
CDL01	Q777342		ARSENIC	.01		.0093	mg/L	93	
CCV	Q777343		ARSENIC	.02		.0181	mg/L	90.5	
BLA01	Q777344		ARSENIC			< .0008	mg/L		

BARIUM ICP (CLP) ILMO1

Analyst : M. JAD

Analysis Date: 07-SEP-93 Instrument: ICP

Test: M904.3.0

Reviewer: S. ENDERSEN

Review Date: 08-SEP-93 File ID:

Run: R196048

Prep: FAA OR ICP ACID DIGESTION OF AQUEOUS SAMPLES (CLP) ILMO1

Prep: TOX CHAR LEACHING PROCEDURE (TCLP W/ ORGANICS) SW846-1311

QC Type	Identifier	Source	Parameter	True/Sampl	Spike Val	Observed	Units	% Rec	RPD
ICV01	Q776663	PERKIN ELM	BARIUM	2.00		2.02	mg/L	101	
DUP02	Q773991	A288829	BARIUM	0.689		0.731	mg/L		6
SP102	Q773989	A288829	BARIUM	0.689	2.00	2.52	mg/L	92	
1	Q776641	INORGANIC	BARIUM	10		10.1	mg/L	101	
S-A	Q776640	PERKIN ELM	BARIUM	0.500		0.478	mg/L	96	
CCV	Q776492	INORGANIC	BARIUM	5.00		5.16	mg/L	103	
BLA01	Q776486	NA	BARIUM			< 0.004	mg/L		
LCS	Q773987	SPEX	BARIUM	20.0		16.1	mg/L	81	
BLA02	Q773988	NA	BARIUM			< 0.004	mg/L		
SAMPLE	A288945		See Certificate of Analysis						
CCV	Q776377	INORGANIC	BARIUM	5.00		4.99	mg/L	100	
BLA01	Q776371	NA	BARIUM			< 0.004	mg/L		
ICS-A	Q776705	PERKIN ELM	BARIUM	0.500		0.475	mg/L	95	

BERYLLIUM ICP (CLP) ILMO1

Analyst : M. JAD

Analysis Date: 07-SEP-93 Instrument: ICP

Test: M905.3.0

Reviewer: S. ENDERSEN

Review Date: 08-SEP-93 File ID:

Run: R196048

Prep: FAA OR ICP ACID DIGESTION OF AQUEOUS SAMPLES (CLP) ILMO1

Prep: TOX CHAR LEACHING PROCEDURE (TCLP W/ ORGANICS) SW846-1311

QC Type	Identifier	Source	Parameter	True/Sampl	Spike Val	Observed	Units	% Rec	RPD
ICV01	Q776664	PERKIN ELM	BERYLLIUM	0.400		0.403	mg/L	101	
DUP02	Q773991	A288829	BERYLLIUM	0		BDL	mg/L		
SP102	Q773989	A288829	BERYLLIUM	0	0.050	0.0435	mg/L	87	
CDL01	Q776641	INORGANIC	BERYLLIUM	10		10.1	mg/L	101	
ICS-A	Q776640	PERKIN ELM	BERYLLIUM	0.500		0.476	mg/L	95	
CCV	Q776492	INORGANIC	BERYLLIUM	5.00		5.15	mg/L	103	
BLA01	Q776486	NA	BERYLLIUM			< 0.002	mg/L		
LCS	Q773987	SPEX	BERYLLIUM	0.500		0.406	mg/L	81	
2	Q773988	NA	BERYLLIUM			< 0.002	mg/L		
LE	A288945		See Certificate of Analysis						
CV	Q776377	INORGANIC	BERYLLIUM	5.00		5.02	mg/L	100	
BLA01	Q776371	NA	BERYLLIUM			< 0.002	mg/L		
CDL01	Q776706	PERKIN ELM	BERYLLIUM	0.010		0.00711	mg/L	71	

QC Type	Identifier	Source	Parameter	True/Sampl	Spike Val	Observed	Units	% Rec	RPD
ICS-A	Q776705	PERKIN ELM	BERYLLIUM	0.500		0.472	mg/L	94	

CADMIUM ICP (CLP) ILM01

Analyst: M. JAO Analysis Date: 07-SEP-93 Instrument: ICP Test: M908.3.0
 Reviewer: S. ENDERSEN Review Date: 08-SEP-93 File ID: Run: R196048
 Prep: FAA OR ICP ACID DIGESTION OF AQUEOUS SAMPLES (CLP) ILM01
 Prep: TOX CHAR LEACHING PROCEDURE (TCLP W/ ORGANICS) SW846-1311

QC Type	Identifier	Source	Parameter	True/Sampl	Spike Val	Observed	Units	% Rec	RPD
ICV01	Q776664	PERKIN ELM	CADMIUM	0.400		0.417	mg/L	104	
DUP02	Q773991	A288829	CADMIUM	0		BDL	mg/L		
SPI02	Q773989	A288829	CADMIUM	0	0.050	0.0433	mg/L	87	
CDL01	Q776641	INORGANIC	CADMIUM	10		10.3	mg/L	103	
ICS-A	Q776640	PERKIN ELM	CADMIUM	1.00		0.919	mg/L	92	
CCV	Q776492	INORGANIC	CADMIUM	5.00		5.26	mg/L	105	
BLA01	Q776486	NA	CADMIUM			< 0.002	mg/L		
LCS	Q773987	SPEX	CADMIUM	0.500		0.407	mg/L	81	
BLA02	Q773988	NA	CADMIUM			< 0.002	mg/L		
SAMPLE	A288945		See Certificate of Analysis						
CCV	Q776377	INORGANIC	CADMIUM	5.00		5.08	mg/L	102	
BLA01	Q776371	NA	CADMIUM			< 0.002	mg/L		
CDL01	Q776706	PERKIN ELM	CADMIUM	0.010		0.0107	mg/L	107	
ICS-A	Q776705	PERKIN ELM	CADMIUM	1.00		0.925	mg/L	93	

HEXAVALENT CHROMIUM SW846-7196A

Analyst: S. PFEFFER Analysis Date: 07-SEP-93 Test: M110.6.0
 Reviewer: M. SHRAKE Review Date: 07-SEP-93 File ID: 2151-2152 Run: R196027
 Prep: TOX CHAR LEACHING PROCEDURE (TCLP W/ ORGANICS) SW846-1311

QC Type	Identifier	Source	Parameter	True/Sampl	Spike Val	Observed	Units	% Rec	RPD
ICV01	Q776132		HEXAVALENT CHROMIUM	.178		.165	mg/L	92.7	
ICV01	Q776139		HEXAVALENT CHROMIUM	.178		.154	mg/L	86.5	
DUP01	Q776137	A288945	HEXAVALENT CHROMIUM	.05		< .05	mg/L		0
SPI01	Q776136	A288829	HEXAVALENT CHROMIUM	0	.2	.202	mg/L	101	
BLA01	Q776130		HEXAVALENT CHROMIUM			-.003	mg/L		
CDL01	Q776131		HEXAVALENT CHROMIUM	.05		.051	mg/L	102	
CCV	Q776135		HEXAVALENT CHROMIUM	.2		.204	mg/L	102	
SAMPLE	A288945		See Certificate of Analysis						
BLA01	Q776138		HEXAVALENT CHROMIUM			0	mg/L		
CCV	Q776140		HEXAVALENT CHROMIUM	.2		.209	mg/L	104.5	

CHROMIUM ICP (CLP) ILM01

Analyst: M. JAO Analysis Date: 10-SEP-93 Instrument: ICP Test: M910.3.0
 Reviewer: S. ENDERSEN Review Date: 13-SEP-93 File ID: Run: R196508
 Prep: FAA OR ICP ACID DIGESTION OF AQUEOUS SAMPLES (CLP) ILM01
 Prep: TOX CHAR LEACHING PROCEDURE (TCLP W/ ORGANICS) SW846-1311

QC Type	Identifier	Source	Parameter	True/Sampl	Spike Val	Observed	Units	% Rec	RPD
ICV01	Q779575	PERKIN ELM	CHROMIUM	0.400		0.401	mg/L	100	
SPI01	Q779599	A289027	CHROMIUM	0	0.200	0.211	mg/L	106	
DUP01	Q779600	A289027	CHROMIUM	0		BDL	mg/L		
DUP02	Q776735	A288944	CHROMIUM	0		BDL	mg/L		
SPI02	Q776733	A288944	CHROMIUM	0	0.200	0.197	mg/L	99	
CDL01	Q779673	INORGANIC	CHROMIUM	10		9.98	mg/L	100	
ICS-A	Q779674	PERKIN ELM	CHROMIUM	0.500		0.437	mg/L	87	
	Q779641	INORGANIC	CHROMIUM	5.00		4.93	mg/L	99	
	Q779642	NA	CHROMIUM			< 0.004	mg/L		
LCS	Q776731	SPEX	CHROMIUM	2.00		1.83	mg/L	92	
BLA02	Q776732	NA	CHROMIUM			< 0.004	mg/L		
SAMPLE	A288945		See Certificate of Analysis						

QC Type	Identifier	Source	Parameter	True/Sampl	Spike Val	Observed	Units	% Rec	RPD
CCV	Q779670	INORGANIC	CHROMIUM	5.00		4.96	mg/L	99	
11	Q779668	NA	CHROMIUM			< 0.004	mg/L		
01	Q779616	PERKIN ELM	CHROMIUM	0.020		0.0197	mg/L	99	
ICS-A	Q779615	PERKIN ELM	CHROMIUM	0.500		0.452	mg/L	90	

LEAD GFAA (CLP) ILM01

Analyst : J. WALLACE Analysis Date: 10-SEP-93 Instrument: GFAA Test: M916.2.0
 Reviewer: S. O'NEAL Review Date: 13-SEP-93 File ID: 026950 Run: R196571
 Prep: GFAA ACID DIGESTION OF AQUEOUS SAMPLES (CLP) ILM01
 Prep: TOX CHAR LEACHING PROCEDURE (TCLP W/ ORGANICS) SW846-1311

QC Type	Identifier	Source	Parameter	True/Sampl	Spike Val	Observed	Units	% Rec	RPD
ICV01	Q780015		LEAD	.01		.0106	mg/L	106	
DUP01	Q780070	A287207	LEAD	.005		< .005	mg/L		0
DUP02	Q776569	A288944	LEAD	.032		< .032	mg/L		0
SP102	Q776567	A288944	LEAD	.032	.02	.052	mg/L	100	
CDL01	Q780028		LEAD	.003		.0033	mg/L	110	
CCV	Q780029		LEAD	.02		.0203	mg/L	101.5	
BLA01	Q780030		LEAD			< .0012	mg/L		
LCS	Q776565		LEAD	.02		.022	mg/L	110	
BLA02	Q776566		LEAD			< .0012	mg/L		
SAMPLE	A288945		See Certificate of Analysis						
CDL01	Q780035		LEAD	.003		.0028	mg/L	93.3	
CCV	Q780036		LEAD	.02		.0207	mg/L	103.5	
BLA01	Q780037		LEAD			< .0012	mg/L		

MANGANESE ICP (CLP) ILM01

Analyst : M. JAO Analysis Date: 10-SEP-93 Instrument: ICP Test: M919.3.0
 Reviewer: S. ENDERSEN Review Date: 13-SEP-93 File ID: Run: R196508
 Prep: FAA OR ICP ACID DIGESTION OF AQUEOUS SAMPLES (CLP) ILM01
 Prep: TOX CHAR LEACHING PROCEDURE (TCLP W/ ORGANICS) SW846-1311

QC Type	Identifier	Source	Parameter	True/Sampl	Spike Val	Observed	Units	% Rec	RPD
ICV01	Q779575	PERKIN ELM	MANGANESE	0.400		0.403	mg/L	101	
SP101	Q779599	A289027	MANGANESE	0	0.500	0.543	mg/L	109	
DUP01	Q779600	A289027	MANGANESE	0		BDL	mg/L		
DUP02	Q776735	A288944	MANGANESE	0.565		0.552	mg/L		2
SP102	Q776733	A288944	MANGANESE	0.565	0.500	1.00	mg/L	87	
CDL01	Q779673	INORGANIC	MANGANESE	10		9.96	mg/L	100	
ICS-A	Q779674	PERKIN ELM	MANGANESE	0.500		0.456	mg/L	91	
CCV	Q779641	INORGANIC	MANGANESE	5.00		4.91	mg/L	98	
BLA01	Q779642	NA	MANGANESE			< 0.004	mg/L		
LCS	Q776731	SPEX	MANGANESE	5.00		4.50	mg/L	90	
BLA02	Q776732	NA	MANGANESE			< 0.004	mg/L		
SAMPLE	A288945		See Certificate of Analysis						
CCV	Q779670	INORGANIC	MANGANESE	5.00		4.94	mg/L	99	
BLA01	Q779668	NA	MANGANESE			< 0.004	mg/L		
CDL01	Q779616	PERKIN ELM	MANGANESE	0.030		0.0310	mg/L	103	
ICS-A	Q779615	PERKIN ELM	MANGANESE	0.500		0.470	mg/L	94	

MERCURY CVAA (CLP) ILM01

Analyst : G. MAPP Analysis Date: 10-SEP-93 Instrument: CVAA Test: M920.2.0
 Reviewer: R. BYERS Review Date: 13-SEP-93 File ID: 026958 Run: R196597
 Prep: MERCURY CVAA ACID DIGESTION OF AQUEOUS SAMPLES (CLP) ILM01
 Prep: TOX CHAR LEACHING PROCEDURE (TCLP W/ ORGANICS) SW846-1311

QC Type	Identifier	Source	Parameter	True/Sampl	Spike Val	Observed	Units	% Rec	RPD
ICV01	Q780253		MERCURY	.002		.00195	mg/L	97.5	
DUP02	Q776579	A288830	MERCURY	.0005		< .0005	mg/L		0
SP102	Q776577	A288830	MERCURY	0	.001	.00111	mg/L	111	

PROJECT RECORD

QC Type	Identifier	Source	Parameter	True/Sampl	Spike Val	Observed	Units	% Rec	RPD
CCV	Q780339		MERCURY	.003		.00268	mg/L	89.3	
1	Q780340		MERCURY			< .0002	mg/L		
	Q776575		MERCURY	.003		.00292	mg/L	97.3	
BLA02	Q776576		MERCURY			< .0002	mg/L		
SAMPLE	A288945		See Certificate of Analysis						
CCV	Q780341		MERCURY	.003		.00268	mg/L	89.3	
BLA01	Q780342		MERCURY			< .00026	mg/L		

NICKEL ICP (CLP) ILM01

Analyst: M. JAO Analysis Date: 07-SEP-93 Instrument: ICP Test: M922.3.0
 Reviewer: S. ENDERSEN Review Date: 08-SEP-93 File ID: Run: R196048
 Prep: FAA OR ICP ACID DIGESTION OF AQUEOUS SAMPLES (CLP) ILM01
 Prep: TOX CHAR LEACHING PROCEDURE (TCLP W/ ORGANICS) SW846-1311

QC Type	Identifier	Source	Parameter	True/Sampl	Spike Val	Observed	Units	% Rec	RPD
ICV01	Q776664	PERKIN ELM	NICKEL	0.400		0.417	mg/L	104	
DUP02	Q773991	A288829	NICKEL	0.0112		0.0117	mg/L		4
SPI02	Q773989	A288829	NICKEL	0.0112	0.500	0.514	mg/L	101	
CDL01	Q776641	INORGANIC	NICKEL	10		10.2	mg/L	102	
ICS-A	Q776640	PERKIN ELM	NICKEL	1.00		0.896	mg/L	90	
CCV	Q776492	INORGANIC	NICKEL	5.00		5.26	mg/L	105	
BLA01	Q776486	NA	NICKEL			< 0.004	mg/L		
LCS	Q773987	SPEX	NICKEL	5		4	mg/L	80	
BLA02	Q773988	NA	NICKEL			< 0.004	mg/L		
SAMPLE	A288945		See Certificate of Analysis						
CCV	Q776377	INORGANIC	NICKEL	5.00		5.05	mg/L	101	
BLA01	Q776371	NA	NICKEL			< 0.004	mg/L		
ICV01	Q776706	PERKIN ELM	NICKEL	0.080		0.0853	mg/L	107	
	Q776705	PERKIN ELM	NICKEL	1.00		0.911	mg/L	91	

TIN ICP SW846-6010A

Analyst: M. JAO Analysis Date: 10-SEP-93 Instrument: ICP Test: M135.3.0
 Reviewer: S. ENDERSEN Review Date: 13-SEP-93 File ID: Run: R196508
 Prep: FAA OR ICP ACID DIGESTION OF AQUEOUS SAMPLES (CLP) ILM01
 Prep: TOX CHAR LEACHING PROCEDURE (TCLP W/ ORGANICS) SW846-1311

QC Type	Identifier	Source	Parameter	True/Sampl	Spike Val	Observed	Units	% Rec	RPD
DUP01	Q779600	A289027	TIN	0		BDL	mg/L		
DUP02	Q776735	A288944	TIN	0		BDL	mg/L		
SPI02	Q776733	A288944	TIN	0	2.00	1.92	mg/L	96	
CCV	Q779641	INORGANIC	TIN	5.00		4.87	mg/L	97	
BLA01	Q779642	NA	TIN			< 0.02	mg/L		
LCS	Q776731	SPEX	TIN	2.00		1.90	mg/L	95	
BLA02	Q776732	NA	TIN			< 0.02	mg/L		
SAMPLE	A288945		See Certificate of Analysis						
CCV	Q779670	INORGANIC	TIN	5.00		4.89	mg/L	98	
BLA01	Q779668	NA	TIN			< 0.02	mg/L		

SILVER ICP (CLP) ILM01

Analyst: M. JAO Analysis Date: 10-SEP-93 Instrument: ICP Test: M930.3.0
 Reviewer: S. ENDERSEN Review Date: 13-SEP-93 File ID: Run: R196508
 Prep: FAA OR ICP ACID DIGESTION OF AQUEOUS SAMPLES (CLP) ILM01
 Prep: TOX CHAR LEACHING PROCEDURE (TCLP W/ ORGANICS) SW846-1311

QC Type	Identifier	Source	Parameter	True/Sampl	Spike Val	Observed	Units	% Rec	RPD
1	Q779576	PERKIN ELM	SILVER	2.00		1.97	mg/L	99	
	Q779599	A289027	SILVER	0	0.050	0.0605	mg/L	121	
JUP01	Q779600	A289027	SILVER	0		BDL	mg/L		
DUP02	Q776735	A288944	SILVER	0		BDL	mg/L		
SPI02	Q776733	A288944	SILVER	0	0.050	0.0547	mg/L	109	

PROJECT RECORD

QC Type	Identifier	Source	Parameter	True/Sampl	Spike Val	Observed	Units	% Rec	RPD
ML01	Q779673	INORGANIC	SILVER	2		2.00	mg/L	100	
A	Q779674	PERKIN ELM	SILVER	1.00		0.933	mg/L	93	
V	Q779641	INORGANIC	SILVER	1.00		0.990	mg/L	99	
BLA01	Q779642	NA	SILVER			< 0.004	mg/L		
LCS	Q776731	SPEX	SILVER	0.500		0.436	mg/L	87	
BLA02	Q776732	NA	SILVER			< 0.004	mg/L		
SAMPLE	A288945		See Certificate of Analysis						
CCV	Q779670	INORGANIC	SILVER	1.00		0.993	mg/L	99	
BLA01	Q779668	NA	SILVER			< 0.004	mg/L		
CDL01	Q779616	PERKIN ELM	SILVER	0.020		0.0201	mg/L	101	
ICS-A	Q779615	PERKIN ELM	SILVER	1.00		0.947	mg/L	95	

SELENIUM GFAA (CLP) ILM01

Analyst: M. BAUER

Analysis Date: 13-SEP-93 Instrument: GFAA

Test: M928.2.0

Reviewer: S. O'NEAL

Review Date: 14-SEP-93 File ID: 026964

Run: R196623

Prep: GFAA ACID DIGESTION OF AQUEOUS SAMPLES (CLP) ILM01

Prep: TOX CHAR LEACHING PROCEDURE (TCLP W/ ORGANICS) SW846-1311

QC Type	Identifier	Source	Parameter	True/Sampl	Spike Val	Observed	Units	% Rec	RPD
ICV01	Q780567		SELENIUM	.01		.0106	mg/L	106	
DUP02	Q776569	A288944	SELENIUM	.005		< .005	mg/L		0
SPI02	Q776567	A288944	SELENIUM	0	.01	.0076	mg/L	76	
CDL01	Q780575		SELENIUM	.005		.0058	mg/L	116	
CCV	Q780576		SELENIUM	.02		.0197	mg/L	98.5	
BLA01	Q780577		SELENIUM			< .002	mg/L		
LCS	Q776565		SELENIUM	.02		.0204	mg/L	102	
BLA02	Q776566		SELENIUM			< .002	mg/L		
PLE	A288945		See Certificate of Analysis						
A	Q780578		SELENIUM	.005		.0051	mg/L	102	
V	Q780579		SELENIUM	.02		.02	mg/L	100	
BLA01	Q780580		SELENIUM			< .002	mg/L		

VANADIUM ICP (CLP) ILM01

Analyst: M. JAO

Analysis Date: 07-SEP-93 Instrument: ICP

Test: M938.3.0

Reviewer: S. ENDERSEN

Review Date: 08-SEP-93 File ID:

Run: R196048

Prep: FAA OR ICP ACID DIGESTION OF AQUEOUS SAMPLES (CLP) ILM01

Prep: TOX CHAR LEACHING PROCEDURE (TCLP W/ ORGANICS) SW846-1311

QC Type	Identifier	Source	Parameter	True/Sampl	Spike Val	Observed	Units	% Rec	RPD
ICV01	Q776664	PERKIN ELM	VANADIUM	0.400		0.404	mg/L	101	
DUP02	Q773991	A288829	VANADIUM	0.0113		0.0128	mg/L		12
SPI02	Q773989	A288829	VANADIUM	0.0113	0.500	0.465	mg/L	91	
CDL01	Q776641	INORGANIC	VANADIUM	10		10.2	mg/L	102	
ICS-A	Q776640	PERKIN ELM	VANADIUM	0.500		0.462	mg/L	92	
CCV	Q776492	INORGANIC	VANADIUM	5.00		5.30	mg/L	106	
BLA01	Q776486	NA	VANADIUM			< 0.004	mg/L		
LCS	Q773987	SPEX	VANADIUM	5.00		4.02	mg/L	80	
BLA02	Q773988	NA	VANADIUM			< 0.004	mg/L		
SAMPLE	A288945		See Certificate of Analysis						
CCV	Q776377	INORGANIC	VANADIUM	5.00		5.08	mg/L	102	
BLA01	Q776371	NA	VANADIUM			< 0.004	mg/L		
CDL01	Q776706	PERKIN ELM	VANADIUM	0.100		0.101	mg/L	101	
ICS-A	Q776705	PERKIN ELM	VANADIUM	0.500		0.469	mg/L	94	

ZINC ICP (CLP) ILM01

Analyst: M. JAO

Analysis Date: 07-SEP-93 Instrument: ICP

Test: M939.3.0

Reviewer: S. ENDERSEN

Review Date: 08-SEP-93 File ID:

Run: R196048

Prep: FAA OR ICP ACID DIGESTION OF AQUEOUS SAMPLES (CLP) ILM01
 Prep: TOX CHAR LEACHING PROCEDURE (TCLP W/ ORGANICS) SW846-1311

QC Type	Identifier	Source	Parameter	True/Sampl	Spike Val	Observed	Units	% Rec	RPD
ICV01	Q776664	PERKIN ELM	ZINC	0.400		0.428	mg/L	107	
DUP02	Q773991	A288829	ZINC	0.467		0.482	mg/L		3
SPI02	Q773989	A288829	ZINC	0.467	0.500	0.926	mg/L	92	
CDL01	Q776641	INORGANIC	ZINC	10		10.1	mg/L	101	
ICS-A	Q776640	PERKIN ELM	ZINC	1.00		0.963	mg/L	96	
CCV	Q776492	INORGANIC	ZINC	5		5.51	mg/L	110	
BLA01	Q776486	NA	ZINC			< 0.008	mg/L		
LCS	Q773987	SPEX	ZINC	5		3.99	mg/L	80	
BLA02	Q773988	NA	ZINC			.0301	mg/L		
SAMPLE	A288945		See Certificate of Analysis						
CCV	Q776377	INORGANIC	ZINC	5.00		5.18	mg/L	104	
BLA01	Q776371	NA	ZINC			< 0.008	mg/L		
CDL01	Q776706	PERKIN ELM	ZINC	0.040		0.0735	mg/L	184	
ICS-A	Q776705	PERKIN ELM	ZINC	1.00		0.993	mg/L	99	

CYANIDE, TOTAL (AUTOMATED) (CLP) ILM01

Analyst: J. WILDER

Analysis Date: 10-SEP-93 Instrument: AUTO-ANALYZER

Test: G901.4.0

Reviewer: B. BHRAKE

Review Date: 14-SEP-93 File ID: 1036

Run: R196627

Prep: CYANIDE DISTILLATION (CLP) ILM01
 Prep: NEUTRAL WATER LEACHING METHOD (SW846-1310 MODIFIED) SW846-1310(MOD)

QC Type	Identifier	Source	Parameter	True/Sampl	Spike Val	Observed	Units	% Rec	RPD
ICV01	Q780624		CYANIDE	.205		.183	mg/L	89.3	
1	Q780665		CYANIDE	.205		.18	mg/L	87.8	
01	Q780687		CYANIDE	.205		.168	mg/L	82	
ICV01	Q780689		CYANIDE	.205		.172	mg/L	83.9	
DUP02	Q780649	A288830	CYANIDE	.005		< .005	mg/L		0
SPI02	Q780650	A288944	CYANIDE	0	.06	.062	mg/L	103.3	
CDL01	Q780623		CYANIDE	.01		.01	mg/L	100	
CCV	Q780643		CYANIDE	.1		.115	mg/L	115	
BLA01	Q780644		CYANIDE			0	mg/L		
BLA02	Q780651		CYANIDE			0	mg/L		
LCS	Q780652		CYANIDE	.3		.31	mg/L	103.3	
SAMPLE	A288945		See Certificate of Analysis						
CCV	Q780655		CYANIDE	.1		.112	mg/L	112	
BLA01	Q780656		CYANIDE			0	mg/L		
BLA02	Q780668		CYANIDE			0	mg/L		
LCS	Q780658		CYANIDE	.3		.296	mg/L	98.7	

Notes

BDL Below Detection Limit
 < Less Than Lower Detection Limit

PROJECT RECORD

Quality Assurance Officer: _____

CB Boyle

QUALITY ASSURANCE REPORT

Service Location HERITAGE LABORATORIES, INC. 701 W. MORRIS ST. INDIANAPOLIS, IN 46231 (317)243-8305	Received 27-SEP-93	Lab ID A291100
	Complete 12-OCT-93	PO Number 92005 *
	Printed 13-OCT-93	Sampled 31-AUG-93

Sample Description

DESCRIPTION: ECC-04A1-PBM-04
 LOCATION: ECC - ZIONSVILLE

SULFIDE SW846-9030A

Analyst : L. WILSON Analysis Date: 28-SEP-93 Test: G110.4.0
 Reviewer: B. SHRAKE Review Date: 28-SEP-93 File ID: 1480-1482 Run: R198019
 Prep: TOTAL AVAILABLE SULFIDE EXTRACTION SW 7.3.4.1

QC Type	Identifier	Source	Parameter	True/Sampl	Spike Val	Observed	Units	% Rec	RPD
DUP02	Q791042	D117815	SULFIDE	10		< 10	mg/kg		0
BLA01	Q791040		SULFIDE			.259	mg/L		
LCS	Q791044		SULFIDE	72.8		85.5	mg/L	117.4	
SAMPLE	A291100		See Certificate of Analysis						
LCS	Q791045		SULFIDE	72.8		81.7	mg/L	112.2	

POLYCHLORINATED BIPHENYLS (PCBS) SW846-8080

Analyst : L. WILLIAMS Analysis Date: 28-SEP-93 Instrument: GC/ECD Test: Q301.2.0
 Reviewer: L. JULIAN Review Date: 28-SEP-93 File ID: 4412 Run: R197982
 Prep: PCB SONICATION EXTRACTION SW846-3550

QC Type	Identifier	Source	Parameter	True/Sampl	Spike Val	Observed	Units	% Rec	RPD
DUP01	Q790741		PCB AROCHLOR 1248	.45		.415	mg/L	92.2	
ICV01	Q790741		PCB AROCHLOR 1260	.45		.493	mg/L	109.6	
DPS02	Q783695	A290125	PCB AROCHLOR 1260	0	8.81	9.3	mg/kg	105.6	8.8
SPI02	Q783694	A290125	PCB AROCHLOR 1260	0	8.97	8.67	mg/kg	96.7	
CCV	Q790744		PCB AROCHLOR 1248	.5		.499	mg/L	99.8	
CCV	Q790744		PCB AROCHLOR 1260	.5		.523	mg/L	104.6	
BLA02	Q783692	EMS	PCB AROCHLOR 1016			< .4	mg/kg		
BLA02	Q783692	EMS	PCB AROCHLOR 1221			< 2	mg/kg		
BLA02	Q783692	EMS	PCB AROCHLOR 1232			< .4	mg/kg		
BLA02	Q783692	EMS	PCB AROCHLOR 1242			< .4	mg/kg		
BLA02	Q783692	EMS	PCB AROCHLOR 1248			< .4	mg/kg		
BLA02	Q783692	EMS	PCB AROCHLOR 1254			< .4	mg/kg		
BLA02	Q783692	EMS	PCB AROCHLOR 1260			< .4	mg/kg		
LCS	Q783693		PCB AROCHLOR 1260	8.99		7.2	mg/kg	80.1	
SAMPLE	A291100		See Certificate of Analysis						

Notes

< Less Than Lower Detection Limit

PROJECT RECORD

Quality Assurance Officer: _____

CB Boyle

EMS Heritage Laboratories, Indianapolis
 SW846-8240 Volatile Continuing Calibration Check

File ID : >0520C Inj Time : 930906 23:50 ID File : CLPVOL::A2
 Analyst : GREG Calibration File : CLPCAL::A2
 Mass Spec ID : GCMS#3 Last Calibration File Update : 930427 13:10

Calibration
 Data Files: 20 uG/L->7572C 50 uG/L->7580C 200 uG/L->7576C
 100 uG/L->7574C 150 uG/L->7575C

Minimum RF for SPCC is .30 Maximum % Diff for CCC is 25%

Compound	RF	RF	%Diff	CCC	SPCC
Acrolein	.03791	.01888	50.21		(Conc=300.00)
Acrylonitrile	.25747	.62481	142.67		(Conc=300.00)
Chloromethane	.46473	.40592	12.66	**	
Bromomethane	1.23062	1.26069	2.44		
Vinyl Chloride	.78656	.80304	2.09	*	
Dichlorodifluoromethane	.97248	1.28853	32.50		
Chloroethane	.50889	.53228	4.60		
Methylene Chloride	1.26465	1.31577	4.04		
Acetone	.52412	.58713	12.02		
Carbon Disulfide	2.19291	2.43929	11.24		
Trichlorofluoromethane	4.26114	2.87052	32.63		
1,1-Dichloroethene	1.06881	1.18689	11.05	*	
1,1-Dichloroethane	2.49933	2.27337	9.04	**	
[Tetrahydrofuran]	.30373	.33048	8.81		(Conc=125.00)
1,2-Dichloroethene (total)	1.27695	1.33692	4.70		(Conc=100.00)
Diethyl Ether	.73197	.68455	6.48		
Chloroform	4.57810	4.05677	11.39	*	
Trichloro-trifluoroethane	2.64979	2.51515	5.08		
1,2-Dichloroethane-d4	3.85703	2.84090	26.34		
2-Butanone	.67453	.67970	.77		
1,2-Dichloroethane	3.99280	3.17448	20.49		
Methyl-t-butyl ether	1.17331	1.02719	12.45		
1,1,1-Trichloroethane	1.32047	1.10075	16.64		
Carbon Tetrachloride	1.52478	1.24633	18.26		
Vinyl Acetate	.50081	.38326	23.47		
Bromodichloromethane	1.36202	1.11881	17.86		
1,2-Dichloropropane	.35661	.34312	3.78	*	
cis-1,3-Dichloropropene	.82416	.75236	8.71		
Trichloroethene	.54845	.59785	9.01		
Diisopropyl Ether	.88798	.87647	1.30		
2-Chloroethyl Vinyl Ether	.24179	.20548	15.02		
Dibromochloromethane	1.34716	1.22380	9.16		

CCC - Calibration Check Compounds (*) SPCC - System Performance Check Compounds (**)

PROJECT RECORD

EMS Heritage Laboratories, Indianapolis
 SW846-8240 Volatile Continuing Calibration Check

File ID : >0520C Inj Time : 930906 23:50 ID File : CLPVOL::A2
 Analyst : GREG Calibration File : CLPCAL::A2
 Mass Spec ID : GCMS#3 Last Calibration File Update : 930427 13:10

Calibration
 Data Files: 20 uG/L->7572C 50 uG/L->7580C 200 uG/L->7576C
 100 uG/L->7574C 150 uG/L->7575C

Minimum RF for SPCC is .30 Maximum % Diff for CCC is 25%

Compound	RF	RF	%Diff	CCC	SPCC
1,1,2-Trichloroethane	.47195	.44690	5.31		
Benzene	.80018	.86332	7.89	*	
trans-1,3-Dichloropropene	.79098	.68887	12.91		
Bromoform	1.09178	.98358	9.91		**
4-Methyl-2-Pentanone	.49437	.49291	.29		
2-Hexanone	.39601	.40190	1.49		
Tetrachloroethene	.57476	.58821	2.34		
1,1,2,2-Tetrachloroethane	.86359	.83697	3.08		**
Toluene-d8	1.22415	1.13252	7.49		
Toluene	.66882	.73481	9.87	*	
Chlorobenzene	1.03491	1.03995	.49		**
Ethylbenzene	.45467	.48089	5.77	*	
Bromofluorobenzene	1.24872	1.07446	13.95		
Styrene	.98172	1.00350	2.22		
m-Xylene	.57225	.65621	14.67		
o,p-Xylene	.56307	.58818	4.46		(Conc=100.00)
m-Dichlorobenzene	1.26062	1.21119	3.92		
o,p-Dichlorobenzene	1.17866	1.22315	3.77		(Conc=100.00)

PROJECT RECORD

RF - Response Factor from daily standard file at 50.00 ug/L
 RF - Average Response Factor from Initial Calibration Form VI
 %Diff - % Difference from original average or curve

CCC - Calibration Check Compounds (*) SPCC - System Performance Check Compounds (**)

HERITAGE LABORATORIES, INC
VOLATILES ANALYSIS- WATER METHOD BLANK
ANALYSIS METHOD: OLM01

S SPEC FILE: >0521C
ANALYSIS DATE/TIME: 9/7/93 00:58

COMPOUND NAME	RESULT	LIMIT	UNITS
CHLOROMETHANE	BDL	10	UG/L
BROMOMETHANE	BDL	10	UG/L
VINYL CHLORIDE	BDL	10	UG/L
CHLOROETHANE	BDL	10	UG/L
METHYLENE CHLORIDE	BDL	10	UG/L
ACETONE	BDL	10	UG/L
CARBON DISULFIDE	BDL	10	UG/L
1,1-DICHLOROETHENE	BDL	10	UG/L
1,1-DICHLOROETHANE	BDL	10	UG/L
1,2-DICHLOROETHENE (TOTAL)	BDL	10	UG/L
CHLOROFORM	BDL	10	UG/L
1,2-DICHLOROETHANE	BDL	10	UG/L
2-BUTANONE	BDL	10	UG/L
1,1,1-TRICHLOROETHANE	BDL	10	UG/L
CARBON TETRACHLORIDE	BDL	10	UG/L
BROMODICHLOROMETHANE	BDL	10	UG/L
1,2-DICHLOROPROPANE	BDL	10	UG/L
CIS-1,3-DICHLOROPROPENE	BDL	10	UG/L
TRICHLOROETHENE	BDL	10	UG/L
DIBROMOCHLOROMETHANE	BDL	10	UG/L
1,1,2-TRICHLOROETHANE	BDL	10	UG/L
TOLUENE	BDL	10	UG/L
CIS-1,3-DICHLOROPROPENE	BDL	10	UG/L
BROMOFORM	BDL	10	UG/L
4-METHYL-2-PENTANONE	BDL	10	UG/L
2-HEXANONE	BDL	10	UG/L
TETRACHLOROETHENE	BDL	10	UG/L
TOLUENE	BDL	10	UG/L
1,1,2,2-TETRACHLOROETHANE	BDL	10	UG/L
CHLOROBENZENE	BDL	10	UG/L
ETHYLBENZENE	BDL	10	UG/L
STYRENE	BDL	10	UG/L
XYLENE (TOTAL)	BDL	10	UG/L

SURROGATE RECOVERY

DICHLOROETHANE-D4	105	% RECOVERY
TOLUENE-D8	100	% RECOVERY
BROMOFLUOROBENZENE	101	% RECOVERY

PROJECT RECORD

Heritage Laboratory, Indianapolis
Semi-volatile Continuing Calibration Report

Operator ID: _____ Date Acquired: 14 Sep 93 10:29 am
 File: C:\F091493\4465F.D GCMS#6
 Conc. 50 ug/mL
 Method: CALPEST.M Title: CLP BNA Calibration
 Last Calibration Update: Wed Sep 15 11:24:47 1993

C = CCC Max Dev = 25% P = SPCC Min RF = 0.05
 S = Surrogate I = ISTD M = Matrix Spike Compound
 cal20 = 4448F.D cal150 = 4444F.D cal180 = 4447F.D
 cal120 = 4446F.D cal160 = 4445F.D

PK#	Compound	AvgRRF	CCRRF	%Dev
1 I	1,4-Dichlorobenzene-d4	1.000	1.000	0.0
2	N-nitroso-dimethylamine	0.576	0.615	6.7
3	Pyridine	0.904	1.010	11.7
4	2-Picoline	1.096	1.175	7.2
5 S	2-Fluorophenol	0.990	1.141	15.3
6	Aniline	1.632	1.838	12.6
7 S	Phenol-d5	1.235	1.397	13.2
8 MC	Phenol	1.297	1.450	11.8#
9	bis(2-Chloroethyl)ether	1.153	1.327	15.1
10 S	2-Chlorophenol-d4	1.072	1.170	9.1
11 MC	2-Chlorophenol	1.173	1.328	13.3#
12	1,3-Dichlorobenzene	1.292	1.445	11.8
13 MC	1,4-Dichlorobenzene	1.323	1.477	11.6#
14 S	1,2-Dichlorobenzene-d4	1.373	1.535	11.9
15	1,2-Dichlorobenzene	1.259	1.423	13.1
	Benzyl alcohol	0.664	0.755	13.8
	2-Methylphenol	0.870	0.996	14.4
18	bis(2-chloroisopropyl)ether	1.935	2.194	13.4
19 MP	n-Nitroso-di-n-propylamine	0.789	0.875	10.9
20	4-Methylphenol	0.910	1.061	16.5
21	Hexachloroethane	0.566	0.634	12.0
22 I	Naphthalene-d8	1.000	1.000	0.0
23 S	Nitrobenzene-d5	0.334	0.370	10.8
24	Nitrobenzene	0.344	0.389	12.9
25	Isophorone	0.659	0.706	7.1
26 C	2-Nitrophenol	0.234	0.250	6.7#
27	2,4-Dimethylphenol	0.321	0.351	9.4
28	bis(2-Chloroethoxy)methane	0.414	0.475	14.7
29 C	2,4-Dichlorophenol	0.312	0.332	6.5#
30	Benzoic acid	0.230	0.235	2.3
31 M	1,2,4-Trichlorobenzene	0.302	0.311	3.1
32	Naphthalene	0.902	1.019	13.0
33	4-Chloroaniline	0.385	0.490	27.1#
34	Toluenediamine	0.000	0.001	113.5#
35 C	Hexachlorobutadiene	0.171	0.168	1.8#
36 MC	4-Chloro-3-methylphenol	0.288	0.309	7.2#
37	2-Methylnaphthalene	0.597	0.658	10.2
38 I	Acenaphthene-d10	1.000	1.000	0.0
39 P	Hexachlorocyclopentadiene	0.306	0.277	9.7
40	1,2,4,5-Tetrachlorobenzene	0.528	0.502	4.8
	C 2,4,6-Trichlorophenol	0.377	0.368	2.4#
	2,4,5-Trichlorophenol	0.387	0.379	2.0
43 S	2-Fluorobiphenyl	1.126	1.147	1.9

PROJECT RECORD

HERITAGE LABORATORIES, INC
SEMI-VOLATILES ANALYSIS- WATER METHOD BLANK
ANALYSIS METHOD: OLM01

MASS SPEC FILE: >4470F

SVL# 645-685

ANALYSIS DATE/TIME: 9/14/93 14:52

PREP DATE: 9/9/93

CAS No.	Compound	Result	Units	Detection limit
108-95-2	Phenol	BDL	uG/L	10
111-44-4	bis(2-Chloroethyl)ether	BDL	uG/L	10
95-57-8	2-Chlorophenol	BDL	uG/L	10
541-57-1	1,3-Dichlorobenzene	BDL	uG/L	10
106-46-7	1,4-Dichlorobenzene	BDL	uG/L	10
95-50-1	1,2-Dichlorobenzene	BDL	uG/L	10
95-48-7	2-Methylphenol	BDL	uG/L	10
108-60-1	bis(2-Chloroisopropyl)ether	BDL	uG/L	10
106-44-5	4-Methylphenol	BDL	uG/L	10
621-64-7	n-Nitroso-di-n-propylamine	BDL	uG/L	10
67-72-1	Hexachloroethane	BDL	uG/L	10
98-95-3	Nitrobenzene	BDL	uG/L	10
78-59-1	Isophorone	BDL	uG/L	10
98-75-5	2-Nitrophenol	BDL	uG/L	10
95-67-9	2,4-Dimethylphenol	BDL	uG/L	10
111-91-1	bis(2-Chloroethoxy)methane	BDL	uG/L	10
120-83-2	2,4-Dichlorophenol	BDL	uG/L	10
120-82-1	1,2,4-Trichlorobenzene	BDL	uG/L	10
91-20-3	Naphthalene	BDL	uG/L	10
106-47-8	4-Chloroaniline	BDL	uG/L	10
87-68-3	Hexachlorobutadiene	BDL	uG/L	10
59-50-7	4-Chloro-3-methylphenol	BDL	uG/L	10
91-57-6	2-Methylnaphthalene	BDL	uG/L	10
77-47-4	Hexachlorocyclopentadiene	BDL	uG/L	10
88-06-2	2,4,6-Trichlorophenol	BDL	uG/L	10
95-95-4	2,4,5-Trichlorophenol	BDL	uG/L	10
91-58-7	2-Chloronaphthalene	BDL	uG/L	10
88-74-4	2-Nitroaniline	BDL	uG/L	25
131-11-3	Dimethylphthalate	BDL	uG/L	10
208-96-8	Acenaphthylene	BDL	uG/L	10
606-20-2	2,6-Dinitrotoluene	BDL	uG/L	10
99-09-2	3-Nitroaniline	BDL	uG/L	25
83-32-9	Acenaphthene	BDL	uG/L	10
51-28-5	2,4-Dinitrophenol	BDL	uG/L	25
100-02-7	4-Nitrophenol	BDL	uG/L	25
132-64-9	Dibenzofuran	BDL	uG/L	10
121-14-2	2,4-Dinitrotoluene	BDL	uG/L	10
84-66-2	Diethylphthalate	BDL	uG/L	10
7005-72-3	4-Chlorophenyl-phenylether	BDL	uG/L	10
86-73-7	Fluorene	BDL	uG/L	10
100-01-6	4-Nitroaniline	BDL	uG/L	25

MASS SPEC FILE:

CAS	Compound	Result	Units	Detection Limit
534-52-1	4,6-Dinitro-2-methylphenol	BDL	uG/L	25
83-30-6	n-Nitrosodiphenylamine (1)	BDL	uG/L	10
101-55-3	4-Bromophenyl-phenylether	BDL	uG/L	10
118-74-1	Hexachlorobenzene	BDL	uG/L	10
87-86-5	Pentachlorophenol	BDL	uG/L	25
85-01-8	Phenanthrene	BDL	uG/L	10
120-12-7	Anthracene	BDL	uG/L	10
86-74-8	Carbazole	BDL	uG/L	10
84-74-2	Di-n-butylphthalate	BDL	uG/L	10
206-44-0	Fluoranthene	BDL	uG/L	10
129-00-0	Pyrene	BDL	uG/L	10
85-68-7	Butylbenzylphthalate	BDL	uG/L	10
91-94-1	3,3'-Dichlorobenzidine	BDL	uG/L	10
56-55-3	Benzo(a)anthracene	BDL	uG/L	10
218-01-9	Chrysene	BDL	uG/L	10
117-81-7	Bis(2-Ethylhexyl)phthalate	BDL	uG/L	10
117-84-0	Di-n-octylphthalate	BDL	uG/L	10
205-99-2	Benzo(b)fluoranthene	BDL	uG/L	10
207-08-9	Benzo(k)fluoranthene	BDL	uG/L	10
50-32-8	Benzo(a)pyrene	BDL	uG/L	10
193-39-5	Indeno(1,2,3-cd)pyrene	BDL	uG/L	10
53-70-3	Dibenz(a,h)anthracene	BDL	uG/L	10

SURROGATE LIST

2-Fluorophenol.....	73	% Recovery
Phenol.....	78	% Recovery
Nitrobenzene-d5.....	80	% Recovery
2-Chlorophenol-d4.....	80	% Recovery
2-Fluorobiphenyl.....	91	% Recovery
2,4,6-tribromophenol.....	75	% Recovery
Terphenyl-d14.....	81	% Recovery
1,2-Dichlorobenzene-d4...	65	% Recovery

ALSO DETECTED	EST. CONC.	R.T.
2-Ethoxy-2-methyl-butane	16	4.95
4-Hydroxy-4-methyl-2-pentanone	6	8.39

PROJECT RECORD

Heritage Laboratory, Indianapolis
Semi-volatile Continuing Calibration Report

Operator ID: _____ Date Acquired: 15 Sep 93 9:34 am
 File: C:\F091593\4480F.D GCMS#6
 Conc. 50 ug/mL
 Method: CALPEST.M Title: CLP BNA Calibration
 Last Calibration Update: Wed Sep 15 11:24:47 1993

C = CCC Max Dev = 25% P = SPCC Min RF = 0.05
 S = Surrogate I = ISTD M = Matrix Spike Compound
 cal20 = 4448F.D cal150 = 4444F.D cal80 = 4447F.D
 cal120 = 4446F.D cal160 = 4445F.D

PK#	Compound	AvgRRF	CCRF	%Dev
1 I	1,4-Dichlorobenzene-d4	1.000	1.000	0.0
2	N-nitroso-dimethylamine	0.576	0.561	2.7
3	Pyridine	0.904	1.004	11.1
4	2-Picoline	1.096	1.145	4.5
5 S	2-Fluorophenol	0.990	1.108	11.9
6	Aniline	1.632	1.704	4.4
7 S	Phenol-d5	1.235	1.310	6.1
8 MC	Phenol	1.297	1.516	16.9#
9	bis(2-Chloroethyl)ether	1.153	1.357	17.7
10 S	2-Chlorophenol-d4	1.072	1.128	5.3
11 MC	2-Chlorophenol	1.173	1.284	9.5#
12	1,3-Dichlorobenzene	1.292	1.454	12.5
13 MC	1,4-Dichlorobenzene	1.323	1.474	11.4#
14 S	1,2-Dichlorobenzene-d4	1.373	1.530	11.5
15	1,2-Dichlorobenzene	1.259	1.428	13.4
	Benzyl alcohol	0.664	0.727	9.6
	2-Methylphenol	0.870	0.939	7.9
18	bis(2-chloroisopropyl)ether	1.935	1.995	3.1
19 MP	n-Nitroso-di-n-propylamine	0.789	0.756	4.1
20	4-Methylphenol	0.910	0.975	7.1
21	Hexachloroethane	0.566	0.642	13.4
22 I	Naphthalene-d8	1.000	1.000	0.0
23 S	Nitrobenzene-d5	0.334	0.327	2.1
24	Nitrobenzene	0.344	0.358	3.8
25	Isophorone	0.659	0.643	2.5
26 C	2-Nitrophenol	0.234	0.213	9.3#
27	2,4-Dimethylphenol	0.321	0.313	2.4
28	bis(2-Chloroethoxy)methane	0.414	0.457	10.3
29 C	2,4-Dichlorophenol	0.312	0.283	9.1#
30	Benzoic acid	0.230	0.171	25.4#
31 M	1,2,4-Trichlorobenzene	0.302	0.296	2.0
32	Naphthalene	0.902	1.015	12.6
33	4-Chloroaniline	0.385	0.400	3.8
34	Toluediamine	0.000	0.001	146.4#
35 C	Hexachlorobutadiene	0.171	0.155	9.0#
36 MC	4-Chloro-3-methylphenol	0.288	0.269	6.8#
37	2-Methylnaphthalene	0.597	0.589	1.4
38 I	Acenaphthene-d10	1.000	1.000	0.0
39 P	Hexachlorocyclopentadiene	0.306	0.280	8.5
40	1,2,4,5-Tetrachlorobenzene	0.528	0.540	2.4
	2,4,6-Trichlorophenol	0.377	0.367	2.6#
	2,4,5-Trichlorophenol	0.387	0.346	10.7
3 S	2-Fluorobiphenyl	1.126	1.233	9.5

PROJECT RECORD

Heritage Laboratory, Indianapolis
Semi-volatile Continuing Calibration Report

Operator ID: _____ Date Acquired: 15 Sep 93 9:34 am
 File: C:\F091593\4480F.D GCMS#6
 Conc. 50 ug/mL
 Method: CALPEST.M Title: CLP BNA Calibration
 Last Calibration Update: Wed Sep 15 11:24:47 1993

C = CCC Max Dev = 25% P = SPCC Min RF = 0.05
 S = Surrogate I = ISTD M = Matrix Spike Compound
 cal20 = 4448F.D cal50 = 4444F.D cal80 = 4447F.D
 cal120 = 4446F.D cal160 = 4445F.D

PK#	Compound	AvgRRF	CCRF	%Dev
44	2-Chloronaphthalene	1.090	1.271	16.6
45	2-Nitroaniline	0.366	0.350	4.3
46	Dimethylphthalate	1.251	1.290	3.1
47	1,3-Dinitrobenzene	0.260	0.205	21.2
48	2,6-Dinitrotoluene	0.371	0.352	5.2
49	Acenaphthylene	1.752	1.896	8.2
50	3-Nitroaniline	0.417	0.416	0.3
51 MC	Acenaphthene	1.044	1.164	11.5#
52 P	2,4-Dinitrophenol	0.214	0.135	36.8#
53 MP	4-Nitrophenol	0.148	0.122	17.6
54	Dibenzofuran	1.511	1.669	10.4
55 M	2,4-Dinitrotoluene	0.500	0.449	10.2
56	2,3,4,6-Tetrachlorophenol	0.324	0.294	9.2
57	Diethylphthalate	1.303	1.489	14.3
FR	Fluorene	1.081	1.311	21.2
U	4-Chlorophenyl-phenylether	0.570	0.642	12.7
U	4-Nitroaniline	0.412	0.396	3.9
61 I	Phenanthrene-d10	1.000	1.000	0.0
62	4,6-Dinitro-2-methylphenol	0.172	0.128	25.5#
63 C	n-Nitrosodiphenylamine	0.456	0.498	9.2#
64 S	2,4,6-Tribromophenol	0.135	0.132	1.9
65	alpha-BHC	0.132	0.144	9.1
66	4-Bromophenyl-phenylether	0.202	0.219	8.5
67	Hexachlorobenzene	0.254	0.258	1.7
68	beta-BHC	0.103	0.112	9.1
69 MC	Pentachlorophenol	0.170	0.152	10.9#
70	gamma-BHC	0.112	0.119	6.3
71	Phenanthrene	0.952	1.064	11.8
72	Anthracene	0.912	1.080	18.5
73	delta-BHC	0.090	0.101	12.4
74	Carbazole	0.763	0.947	24.0
75	Heptachlor	0.115	0.126	9.0
76	Di-n-butylphthalate	1.240	1.466	18.2
77	Aldrin	0.081	0.088	9.6
78	Heptachlor epoxide	0.035	0.044	25.0
79 C	Fluoranthene	1.093	1.180	8.0#
80 I	Chrysene-d12	1.000	1.000	0.0
81	Benzidine	0.419	0.340	18.8
82 M	Pyrene	1.120	1.172	4.6
83	alpha-Endosulfan	0.028	0.030	6.9
U	p,p'-DDE	0.221	0.217	1.9
U S	Terphenyl-d14	0.780	0.795	1.9
86	Dieldrin	0.144	0.159	9.8

PROJECT RECORD

Heritage Laboratory, Indianapolis
Semi-volatile Continuing Calibration Report

Operator ID: _____ Date Acquired: 15 Sep 93 9:34 am
 File: C:\F091593\4480F.D GCMS#6
 conc. 50 ug/mL
 method: CALPEST.M Title: CLP BNA Calibration
 Last Calibration Update: Wed Sep 15 11:24:47 1993

C = CCC Max Dev = 25% P = SPCC Min RF = 0.05
 S = Surrogate I = ISTD M = Matrix Spike Compound
 cal20 = 4448F.D cal50 = 4444F.D cal80 = 4447F.D
 cal120 = 4446F.D cal160 = 4445F.D

PK#	Compound	AvgRRF	CCRF	%Dev
87	Endrin	0.009	0.010	9.2
88	Endrin aldehyde	0.004	0.003	7.9
89	beta-Endosulfan	0.040	0.041	1.6
90	p,p'-DDD	0.401	0.391	2.5
91	Butylbenzylphthalate	0.588	0.627	6.6
92	Endosulfan sulfate	0.084	0.085	1.3
93	p,p'-DDT	0.335	0.318	5.0
94	Benzo[a]anthracene	1.096	1.106	0.9
95	3,3'-Dichlorobenzidine	0.329	0.356	8.2
96	Chrysene	1.031	1.065	3.3
97	bis(2-Ethylhexyl)phthalate	0.789	0.871	10.3
98 I	Perylene-d12	1.000	1.000	0.0
99 C	Di-n-octylphthalate	1.352	1.427	5.5#
100	Benzo[b]fluoranthene	1.109	1.062	4.3
	Benzo[k]fluoranthene	1.076	1.097	2.0
101 C	Benzo[a]pyrene	1.063	1.092	2.7#
103	Indeno[1,2,3-cd]pyrene	1.018	1.154	13.3
104	Dibenz[a,h]anthracene	0.832	0.940	13.0
105	Benzo[g,h,i]perylene	0.837	0.970	15.9

(#) = Out of Range SPCC's out = 0 CCC's out = 14
 4480F.D CALPEST.M Thu Sep 16 10:27:38 1993 RPT1

PROJECT RECORD



TO ENSURE PROPER HANDLING OF SAMPLES PLEASE COMPLETE THIS ENTIRE FORM

HERITAGE LABORATORIES, INC.

I - No 12568

7901 West Morris Street

Indianapolis, Indiana 46231 (317) 243-0811 Fax (317) 486-5095

Co. Name: <u>AWD TECHNOLOGIES</u>				Analyses Requested (Note special detection limits or methods)				Report To:			
Project Name: <u>ENVIRO CHEM</u>								Co: <u>AWD AWD</u>			
Quote No.:		PO No.: <u>2396</u>		PROJECT RECORD				Add: <u>RESIDENCE ENV</u>			
ENVIRONMENTAL PROGRAM:								<u>3553 FOUNDERS RD</u> <u>INDPLS. IN 46268</u>			
CWA NPDES _____ IWP _____ SLUDGE _____								Attn: <u>J. M. FIFE</u>			
RCRA MW _____ SW _____ DISPOSAL _____								Phone: <u>317-872-0462</u>			
SDWA _____ CERCLASUPERFUND <u>X</u> OTHER _____				Accelerated Turnaround Requested <u>YES</u> (Subject to Additional Charge)							
Sampled by: <u>Scott Weishaar / RICH LOGELAND</u>				Result Request by: <u>11 / 06 / 93</u> Mo Day Yr (Date must be Accepted and Approved by Lab)							
Sample ID:	Date:	Time:	Comp	Grab	Sample Description:	Sample Type (Matrix): DW, GW, WW, Soil, Oil, Sludge, Other	No. of Containers	Remarks:		EMS Sample No.	
T-33	11/03	4:40		X	TANK SWIPE - INSIDE	STEEL	2				
T-21	11/03	4:50		X	TANK SWIPE - INSIDE	STEEL	2				
T-16	11/03	4:55		X	TANK SWIPE - INSIDE	STEEL	1				
Relinquished by (Signature)		Date / Time		Received by (Signature)		Relinquished by (Signature)		Date / Time		Received by (Signature)	
<u>Scott Weishaar</u>		11/03/93 5:15 PM		<u>J R Fife</u>		<u>J R Fife</u>		11/4/93 10:25 AM			
Relinquished by (Signature)		Date / Time		Received by (Signature)		Relinquished by (Signature)		Date / Time		Received by (Signature)	
		/						/			
Relinquished by (Signature)		Date / Time		Received for Lab by (Signature)		Date / Time		Remarks			
		/		<u>Robb Cull</u>		11/4/93 10:25 AM					
Distribution: White original to be retained by client. Yellow copy to accompany sample to laboratory. Pink copy to also be retained by client.											

C E R T I F I C A T E O F A N A L Y S I S

Service Location HERITAGE LABORATORIES, INC. 901 W. MORRIS ST. INDIANAPOLIS, IN 46231 (317)243-8305	Received 04-NOV-93	Project 2471	Lab ID A295849
	Complete 12-NOV-93	PO Number 2396	
	Printed 16-NOV-93	Sampled 03-NOV-93 16:40	

Report To JIM FIFE AWD TECHNOLOGIES, INC. 3553 FOUNDERS RD C/O RESIDENCE INN INDIANAPOLIS, IN 46268	Bill To ACCOUNTS PAYABLE AWD TECHNOLOGIES, INC. BUILDING 3, SUITE 300 PENN CENTER WEST PITTSBURGH, PA 15276
--	--

Sample Description

DESCRIPTION: T-33
 LOCATION: ECC - ZIONSVILLE

PCB SONICATION EXTRACTION SW846-3550 Analyst: M. KEEZER Analysis Date: 05-NOV-93 Test: P231.1.0			
Parameter	Result	Det. Limit	Units
INITIAL WEIGHT OR VOLUME			
FINAL VOLUME	70		mL

POLYCHLORINATED BIPHENYLS (PCBS) SW846-8080 Analyst: K. MCKAIN Analysis Date: 10-NOV-93 Instrument: GC/ECD Test: Q301.2.0 Rep: PCB SONICATION EXTRACTION SW846-3550 P231.1.0			
Parameter	Result	Det. Limit	Units
PCB AROCHLOR 1016	BDL	1	ug
PCB AROCHLOR 1221	BDL	5	ug
PCB AROCHLOR 1232	BDL	1	ug
PCB AROCHLOR 1242	BDL	1	ug
PCB AROCHLOR 1248	BDL	1	ug
PCB AROCHLOR 1254	BDL	1	ug
PCB AROCHLOR 1260	BDL	1	ug
PCB AROCHLOR 1262	BDL	1	ug
swipe sample			

Sample Comments

BDL Below Detection Limit

Sample chain of custody number 12568.

This Certificate shall not be reproduced, except in full,
 without the written approval of the lab.

PROJECT RECORD



Quality Assurance Officer: _____

C E R T I F I C A T E O F A N A L Y S I S

Service Location ERITAGE LABORATORIES, INC. 901 W. MORRIS ST. INDIANAPOLIS, IN 46231 (317)243-8305	Received	Project	Lab ID
	04-NOV-93	2471	A295850
	Complete	PO Number	
	12-NOV-93	2396	
	Printed	Sampled	
	16-NOV-93	03-NOV-93 16:40	

Report To	Bill To
JIM FIFE AWD TECHNOLOGIES, INC. 3553 FOUNDERS RD C/O RESIDENCE INN INDIANAPOLIS, IN 46268	ACCOUNTS PAYABLE AWD TECHNOLOGIES, INC. BUILDING 3, SUITE 300 PENN CENTER WEST PITTSBURGH, PA 15276

Sample Description

DESCRIPTION: T-33 (DUPLICATE)
 LOCATION: ECC - ZIONSVILLE

PCB SONICATION EXTRACTION SW846-3550			
Analyst: W. KEEZER	Analysis Date: 05-NOV-93	Test: P231.1.0	
Parameter	Result	Det. Limit	Units
INITIAL WEIGHT OR VOLUME			
FINAL VOLUME	70		mL

POLYCHLORINATED BIPHENYLS (PCBS) SW846-8080			
Analyst: R. MCKAIN	Analysis Date: 10-NOV-93	Instrument: GC/ECD	Test: 0301.2.0
Prep: PCB SONICATION EXTRACTION SW846-3550 P231.1.0			
Parameter	Result	Det. Limit	Units
PCB AROCHLOR 1016	BDL	1	ug
PCB AROCHLOR 1221	BDL	5	ug
PCB AROCHLOR 1232	BDL	1	ug
PCB AROCHLOR 1242	BDL	1	ug
PCB AROCHLOR 1248	BDL	1	ug
PCB AROCHLOR 1254	BDL	1	ug
PCB AROCHLOR 1260	BDL	1	ug
PCB AROCHLOR 1262	BDL	1	ug
swipe sample			

Sample Comments

BDL Below Detection Limit

Sample chain of custody number 12568.

This Certificate shall not be reproduced, except in full, without the written approval of the lab.

PROJECT RECORD



Quality Assurance Officer: _____

C E R T I F I C A T E O F A N A L Y S I S

Service Location HERITAGE LABORATORIES, INC. 1901 W. MORRIS ST. INDIANAPOLIS, IN 46231 (317)243-8305	Received 04-NOV-93	Project 2471	Lab ID A295851
	Complete 12-NOV-93	PO Number 2396	
	Printed 16-NOV-93	Sampled 03-NOV-93 16:50	

Report To JIM FIFE AWD TECHNOLOGIES, INC. 3553 FOUNDERS RD C/O RESIDENCE INN INDIANAPOLIS, IN 46268	Bill To ACCOUNTS PAYABLE AWD TECHNOLOGIES, INC. BUILDING 3, SUITE 300 PENN CENTER WEST PITTSBURGH, PA 15276
---	---

Sample Description

DESCRIPTION: T-21
 LOCATION: ECC - ZIONSVILLE

PCB SONICATION EXTRACTION SW846-3550 Analyst: M. KEEZER Analysis Date: 05-NOV-93 Test: P231.1.0			
Parameter INITIAL WEIGHT OR VOLUME FINAL VOLUME	Result 70	Det. Limit	Units mL

POLYCHLORINATED BIPHENYLS (PCBS) SW846-8080 Analyst: R. MCKAIN Analysis Date: 10-NOV-93 Instrument: GC/ECD Test: 0501.2.0 Prep: PCB SONICATION EXTRACTION SW846-3550 P231.1.0			
Parameter PCB AROCHLOR 1016 PCB AROCHLOR 1221 PCB AROCHLOR 1232 PCB AROCHLOR 1242 PCB AROCHLOR 1248 PCB AROCHLOR 1254 PCB AROCHLOR 1260 PCB AROCHLOR 1262 swipe sample	Result BDL BDL BDL BDL BDL BDL BDL BDL	Det. Limit 1 5 1 1 1 1 1 1	Units ug ug ug ug ug ug ug ug

Sample Comments

BDL Below Detection Limit

Sample chain of custody number 12568.

This Certificate shall not be reproduced, except in full, without the written approval of the lab.

PROJECT RECORD

Quality Assurance Officer: 

CERTIFICATE OF ANALYSIS

Service Location RITAGE LABORATORIES, INC. 901 W. MORRIS ST. INDIANAPOLIS, IN 46231 (317)243-8305	Received	Project	Lab ID
	04-NOV-93	2471	A295852
	Complete	PO Number	
	12-NOV-93	2396	
	Printed	Sampled	
	16-NOV-93	03-NOV-93 16:50	

Report To JIM FIFE AWD TECHNOLOGIES, INC. 3553 FOUNDERS RD C/O RESIDENCE INN INDIANAPOLIS, IN 46268	Bill To ACCOUNTS PAYABLE AWD TECHNOLOGIES, INC. BUILDING 3, SUITE 300 PENN CENTER WEST PITTSBURGH, PA 15276
---	---

Sample Description

DESCRIPTION: T-21 (DUPLICATE)
 LOCATION: ECC - ZIONSVILLE

PCB SONICATION EXTRACTION SW846-3550			
Analyst: M. KEEZER	Analysis Date: 05-NOV-93	Test: P231.1.0	
Parameter	Result	Det. Limit	Units
INITIAL WEIGHT OR VOLUME			
FINAL VOLUME	70		mL

POLYCHLORINATED BIPHENYLS (PCBS) SW846-8080			
Analyst: R. MCKAIN	Analysis Date: 10-NOV-93	Instrument: GC/ECD	Test: 0301.2.0
Prep: PCB SONICATION EXTRACTION SW846-3550 P231.1.0			
Parameter	Result	Det. Limit	Units
PCB AROCHLOR 1016	BDL	1	ug
PCB AROCHLOR 1221	BDL	5	ug
PCB AROCHLOR 1232	BDL	1	ug
PCB AROCHLOR 1242	BDL	1	ug
PCB AROCHLOR 1248	6.0	1	ug
PCB AROCHLOR 1254	BDL	1	ug
PCB AROCHLOR 1260	BDL	1	ug
PCB AROCHLOR 1262	BDL	1	ug
swipe sample			

Sample Comments

BDL Below Detection Limit

Sample chain of custody number 12568.

This Certificate shall not be reproduced, except in full, without the written approval of the lab.

PROJECT RECORD

Quality Assurance Officer: 

C E R T I F I C A T E O F A N A L Y S I S

Service Location TRITAGE LABORATORIES, INC. 301 W. MORRIS ST. INDIANAPOLIS, IN 46231 (317)243-8305	Received 04-NOV-93	Project 2471	Lab ID A295853
	Complete 12-NOV-93	PO Number 2396	
	Printed 16-NOV-93	Sampled 03-NOV-93 16:55	

Report To JIM FIFE AWD TECHNOLOGIES, INC. 3553 FOUNDERS RD C/O RESIDENCE INN INDIANAPOLIS, IN 46268	Bill To ACCOUNTS PAYABLE AWD TECHNOLOGIES, INC. BUILDING 3, SUITE 300 PENN CENTER WEST PITTSBURGH, PA 15276
--	--

Sample Description

DESCRIPTION: T-16
LOCATION: ECC - ZIONSVILLE

PCB SONICATION EXTRACTION SW846-3550
 Analyst: M. KEEZER Analysis Date: 05-NOV-93 Test: P231.1.0

Parameter	Result	Det. Limit	Units
INITIAL WEIGHT OR VOLUME			
FINAL VOLUME	70		mL

POLYCHLORINATED BIPHENYLS (PCBS) SW846-8080
 Analyst: R. MCKAIN Analysis Date: 10-NOV-93 Instrument: GC/ECD Test: 0301.2.0
 Prep: PCB SONICATION EXTRACTION SW846-3550 P231.1.0

Parameter	Result	Det. Limit	Units
PCB AROCHLOR 1016	BDL	1	ug
PCB AROCHLOR 1221	BDL	5	ug
PCB AROCHLOR 1232	BDL	1	ug
PCB AROCHLOR 1242	BDL	1	ug
PCB AROCHLOR 1248	2.4	1	ug
PCB AROCHLOR 1254	BDL	1	ug
PCB AROCHLOR 1260	BDL	1	ug
PCB AROCHLOR 1262	BDL	1	ug
<i>swipe sample</i>			

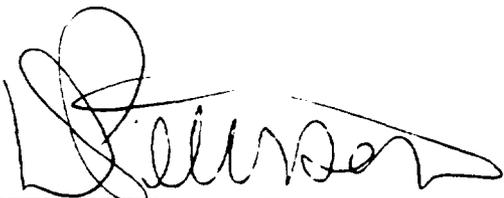
Sample Comments

BDL Below Detection Limit

Sample chain of custody number 12568.

This Certificate shall not be reproduced, except in full,
without the written approval of the lab.

PROJECT RECORD

Quality Assurance Officer: 

QUALITY ASSURANCE REPORT

Service Location HERITAGE LABORATORIES, INC. 901 W. MORRIS ST. INDIANAPOLIS, IN 46231 (317)243-8305	Received	Lab ID
	04-NOV-93	A295849
	Complete	PO Number
	12-NOV-93	2396
	Printed	Sampled
	15-NOV-93	03-NOV-93 16:40

Sample Description

DESCRIPTION: T-33
 LOCATION: ECC - ZIONSVILLE

POLYCHLORINATED BIPHENYLS (PCBS) SW846-8080

Analyst : R. MCKAIN Analysis Date: 10-NOV-93 Instrument: GC/ECD Test: 0301.2.0
 Reviewer: A. GOZDECKI Review Date: 10-NOV-93 File ID: 4569 Run: R201807
 Prep: PCB SONICATION EXTRACTION SW846-3550

QC Type	Identifier	Source	Parameter	True/Sampl	Spike Val	Observed	Units	% Rec	RPD
ICV01	0821493		PCB AROCHLOR 1248	.45		.39	mg/L	86.7	
ICV01	0821493		PCB AROCHLOR 1260	.45		.346	mg/L	76.9	
SP101	0821494	A295849	PCB AROCHLOR 1248	0	35	37	ug	105.7	
DPS01	0821495	A295849	PCB AROCHLOR 1248	0	35	35	ug	100	5.5
BLA02	0818819	EMS	PCB AROCHLOR 1016			< .4	ug		
BLA02	0818819	EMS	PCB AROCHLOR 1221			< 2	ug		
BLA02	0818819	EMS	PCB AROCHLOR 1232			< .4	ug		
BLA02	0818819	EMS	PCB AROCHLOR 1242			< .4	ug		
BLA02	0818819	EMS	PCB AROCHLOR 1248			< .4	ug		
BLA02	0818819	EMS	PCB AROCHLOR 1254			< .4	ug		
BLA02	0818819	EMS	PCB AROCHLOR 1260			< .4	ug		
CS	0818820		PCB AROCHLOR 1260	18		19	ug	105.6	
SAMPLE	A295849		See Certificate of Analysis						
CCV	0821500		PCB AROCHLOR 1248	.5		.555	mg/L	111	
CCV	0821500		PCB AROCHLOR 1260	.5		.552	mg/L	110.4	

Notes

< Less Than Lower Detection Limit

PROJECT RECORD

Quality Assurance Officer: _____ *C. Boyle*

QUALITY ASSURANCE REPORT

Service Location HERITAGE LABORATORIES, INC. 901 W. MORRIS ST. INDIANAPOLIS, IN 46231 (317)243-8305	Received	Lab ID
	04-NOV-93	A295850
	Complete	PO Number
	12-NOV-93	2396
	Printed	Sampled
	15-NOV-93	03-NOV-93 16:40

Sample Description

DESCRIPTION: T-33 (DUPLICATE)
LOCATION: ECC - ZIONSVILLE

POLYCHLORINATED BIPHENYLS (PCBS) SW846-8080
Analyst : R. MCKAIN Analysis Date: 10-NOV-93 Instrument: GC/ECD Test: 0301.2.0
Reviewer: A. GOZDECKI Review Date: 10-NOV-93 File ID: 4569 Run: R201807
Prep: PCB SONICATION EXTRACTION SW846-3550

QC Type	Identifier	Source	Parameter	True/SAMPL	Spike Val	Observed	Units	% Rec	RPD
ICV01	0821493		PCB AROCHLOR 1248	.45		.39	mg/L	86.7	
ICV01	0821493		PCB AROCHLOR 1260	.45		.346	mg/L	76.9	
SPI01	0821494	A295849	PCB AROCHLOR 1248	0	35	37	ug	105.7	
DPS01	0821495	A295849	PCB AROCHLOR 1248	0	35	35	ug	100	5.5
BLA02	0818819	EMS	PCB AROCHLOR 1016			< .4	ug		
BLA02	0818819	EMS	PCB AROCHLOR 1221			< 2	ug		
BLA02	0818819	EMS	PCB AROCHLOR 1232			< .4	ug		
BLA02	0818819	EMS	PCB AROCHLOR 1242			< .4	ug		
BLA02	0818819	EMS	PCB AROCHLOR 1248			< .4	ug		
BLA02	0818819	EMS	PCB AROCHLOR 1254			< .4	ug		
2	0818819	EMS	PCB AROCHLOR 1260			< .4	ug		
MS	0818820		PCB AROCHLOR 1260	18		19	ug	105.6	
SAMPLE	A295850		See Certificate of Analysis						
CCV	0821500		PCB AROCHLOR 1248	.5		.555	mg/L	111	
CCV	0821500		PCB AROCHLOR 1260	.5		.552	mg/L	110.4	

Notes

< Less Than Lower Detection Limit

PROJECT RECORD

Quality Assurance Officer: _____

(Handwritten Signature)

QUALITY ASSURANCE REPORT

Service Location HERITAGE LABORATORIES, INC. 301 W. MORRIS ST. INDIANAPOLIS, IN 46231 (317)243-8305	Received 04-NOV-93	Lab ID A295851
	Complete 12-NOV-93	PO Number 2396
	Printed 15-NOV-93	Sampled 03-NOV-93 16:50

Sample Description DESCRIPTION: T-21 LOCATION: ECC - ZIONSVILLE

POLYCHLORINATED BIPHENYLS (PCBS) SW846-8080
 Analyst : R. MCKAIN Analysis Date: 10-NOV-93 Instrument: GC/ECD Test: 0301.2.0
 Reviewer: A. GOZDECKI Review Date: 10-NOV-93 File ID: 4569 Run: R201807
 Prep: PCB SONICATION EXTRACTION SW846-3550

QC Type	Identifier	Source	Parameter	True/Sampl	Spike Val	Observed	Units	% Rec	RPD
ICV01	Q821493		PCB AROCHLOR 1248	.45		.39	mg/L	86.7	
ICV01	Q821493		PCB AROCHLOR 1260	.45		.346	mg/L	76.9	
SPI01	Q821494	A295849	PCB AROCHLOR 1248	0	35	37	ug	105.7	
DPS01	Q821495	A295849	PCB AROCHLOR 1248	0	35	35	ug	100	5.5
BLA02	Q818819	EMS	PCB AROCHLOR 1016			< .4	ug		
BLA02	Q818819	EMS	PCB AROCHLOR 1221			< 2	ug		
BLA02	Q818819	EMS	PCB AROCHLOR 1232			< .4	ug		
BLA02	Q818819	EMS	PCB AROCHLOR 1242			< .4	ug		
BLA02	Q818819	EMS	PCB AROCHLOR 1248			< .4	ug		
BLA02	Q818819	EMS	PCB AROCHLOR 1254			< .4	ug		
2	Q818819	EMS	PCB AROCHLOR 1260			< .4	ug		
	Q818820		PCB AROCHLOR 1260	18		19	ug	105.6	
SAMPLE	A295851		See Certificate of Analysis						
CCV	Q821500		PCB AROCHLOR 1248	.5		.555	mg/L	111	
CCV	Q821500		PCB AROCHLOR 1260	.5		.552	mg/L	110.4	

Notes

< Less Than Lower Detection Limit

PROJECT RECORD

Quality Assurance Officer: _____

CB Boyle

QUALITY ASSURANCE REPORT

Service Location HERITAGE LABORATORIES, INC. 901 W. MORRIS ST. INDIANAPOLIS, IN 46231 (317)243-8305	Received	Lab ID
	04-NOV-93	A295853
	Complete	PO Number
	12-NOV-93	2396
	Printed	Sampled
	15-NOV-93	03-NOV-93 16:55

Sample Description

DESCRIPTION: T-16
 LOCATION: ECC - ZIONSVILLE

POLYCHLORINATED BIPHENYLS (PCBS) SW846-8080

Analyst : R. MCKAIN Analysis Date: 10-NOV-93 Instrument: GC/ECD Test: 0301.2.0
 Reviewer: A. GOZDECKI Review Date: 10-NOV-93 File ID: 4569 Run: R201807
 Prep: PCB SONICATION EXTRACTION SW846-3550

QC Type	Identifier	Source	Parameter	True/Sampl	Spike Val	Observed	Units	% Rec	RPD
ICV01	Q821493		PCB AROCHLOR 1248	.45		.39	mg/L	86.7	
ICV01	Q821493		PCB AROCHLOR 1260	.45		.346	mg/L	76.9	
SP101	Q821494	A295849	PCB AROCHLOR 1248	0	35	37	ug	105.7	
DPS01	Q821495	A295849	PCB AROCHLOR 1248	0	35	35	ug	100	5.5
BLA02	Q818819	EMS	PCB AROCHLOR 1016			< .4	ug		
BLA02	Q818819	EMS	PCB AROCHLOR 1221			< 2	ug		
BLA02	Q818819	EMS	PCB AROCHLOR 1232			< .4	ug		
BLA02	Q818819	EMS	PCB AROCHLOR 1242			< .4	ug		
BLA02	Q818819	EMS	PCB AROCHLOR 1248			< .4	ug		
BLA02	Q818819	EMS	PCB AROCHLOR 1254			< .4	ug		
BLA02	Q818819	EMS	PCB AROCHLOR 1260			< .4	ug		
BLA02	Q818820		PCB AROCHLOR 1260	18		19	ug	105.6	
SAMPLE	A295853		See Certificate of Analysis						
CCV	Q821500		PCB AROCHLOR 1248	.5		.555	mg/L	111	
CCV	Q821500		PCB AROCHLOR 1260	.5		.552	mg/L	110.4	

Notes

< Less Than Lower Detection Limit

PROJECT RECORD

Quality Assurance Officer: _____

C. Boyle



TO ENSURE PROPER HANDLING OF SAI PLEASE COMPLETE THIS ENTIRE FORM

HERITAGE LABORATORIES, INC.

I - No 14519

7901 West Morris Street

Indianapolis, Indiana 46231 (317) 243-0811 Fax (317) 486-5095

Co. Name: AWD TECHNOLOGIES					Report To:								
Project Name: ENVIRO - CHEM					Co: AWD TECH								
Quote No.:			PO No.: 2596 - 010		Add: RESIDENCE INN								
ENVIRONMENTAL PROGRAM:					3553 FOUNDERS RD								
CWA NPDES IWP SLUDGE					INDPLS. IN 46268								
RCRA MW SW DISPOSAL					Attn: JAMES FIFE								
SDWA CERCLA/SUPERFUND <input checked="" type="checkbox"/> OTHER					Phone: 317-872-0462								
Sampled by: SCOTT WEISHAAR / TONY CASTOR					Accelerated Turnaround Requested _____ (Subject to Additional Charge)								
					Result Request by: <u> </u> / <u> </u> / <u> </u> Mo Day Yr (Date must be Accepted and Approved by Lab)								
					Remarks:								
					EMS Sample No.								
Sample ID:	Date:	Time:	Comp	Grab	Sample Description:	Sample Type (Matrix): DW, GW, WW, Soil, Oil, Sludge, Other	No. of Containers	TCLP METALS	VOA	S.VOA	TOTAL CN	REACTIVE SULFIDES	pH
1	10/20/93	0830		X	ECC-04A1-PBM-07	CERCLA	1						
2	10/20/93	0845		X	ECC-04A1-PBM-08	ASB	1						
Relinquished by (Signature): <i>Scott Weishaar</i>					Date / Time: 10/20/93 0930		Received by (Signature): <i>JR Fife</i>					Date / Time: 10/21/93 11:00	
Relinquished by (Signature):					Date / Time: 1		Received by (Signature):					Date / Time: 1	
Relinquished by (Signature):					Date / Time: 1		Received for Lab by (Signature): <i>S. Asher</i>			Date / Time: 10/21/93 11:00		Remarks:	
Distribution: White: original to be retained by client. Yellow copy to accompany sample to laboratory. Pink copy to also be retained by client													

PROJECT RECORD



Memorandum

PGH-93-TMJ-1223

TO: Mark J. Dowiak
DATE: November 5, 1993

FROM: Thomas M. Jackman *TJ*
COPIES: James R. Fife
Haia K. Roffman
File

SUBJECT: Data Validation - ECC, Zionsville Site
Sample Numbers - ECC-4A1-PBM-07 and ECC-4A1-PBM-08
AWD Project Number 2396.013
(Field Construction Support)

The above referenced analytical data, prepared in accordance with SW-846 Test Method 1311: Toxicity Characteristic Leaching Procedure (TCLP), were reviewed for accuracy and adherence to prescribed analytical protocols for the following parameters:

- Contract required detection limits
- Surrogate spike recoveries
- Standard addition (MSA) results for metals
- Spiked sample recoveries
- Continuing calibration verification percent differences (%Ds)
- Calibration response factors
- Laboratory blanks

All quality control parameters associated with the two ECC samples in this data set were reviewed according to U.S. EPA data validation guidelines. All reviewed parameters meet quality control requirements and are acceptable for their intended use.

The TCLP results were also compared to TCLP Maximum Allowable Limits for those compound for which limits exist (see Data Summaries). A comparison of the TCLP results to allowable limits shows that all positive detected results are below the RCRA Maximum Allowable Limits, with the exception of lead in sample ECC-04A1-PBM-08. The lead result in this sample was 13 mg/L and the TCLP limit is 5 mg/L.

TMJ/drp

PROJECT RECORD

**DATA SUMMARY
ENVIROCHEM TCLP RESULTS
VOLATILE AND SEMIVOLATILE ORGANICS**

	SAMPLE NO. ECC-04A1-PBM-07		ECC-04A1-PBM-08		RCRA TCLP LIMITS
	UNITS	MG/L	MG/L		MG/L
<u>VOLATILES</u>					
BENZENE		0.05 U	0.05 U		0.5
CARBON TETRACHLORIDE		0.05 U	0.05 U		0.5
CHLOROBENZENE		0.05 U	0.05 U		100
CHLOROFORM		0.05 U	0.05 U		6
1,2-DICHLOROETHANE		0.05 U	0.05 U		0.5
1,1-DICHLOROETHYLENE		0.05 U	0.05 U		0.7
METHYL ETHYL KETONE		0.1 U	0.1 U		200
TETRACHLOROETHYLENE		0.05 U	0.05 U		0.7
TRICHLOROETHYLENE		0.05 U	0.05 U		0.5
VINYL CHLORIDE		0.1 U	0.1 U		0.2
<u>SEMIVOLATILES</u>					
1,4-DICHLOROBENZENE		0.05 U	0.05 U		7.5
2,4-DINITROTOLUENE		0.05 U	0.05 U		0.13
HEXACHLOROBENZENE		0.05 U	0.05 U		0.13
HEXACHLOROBUTADIENE		0.05 U	0.05 U		0.5
HEXACHLOROETHANE		0.05 U	0.05 U		3
NITROBENZENE		0.05 U	0.05 U		2
PYRIDINE		0.25 U	0.25 U		5
2-METHYL PHENOL		0.05 U	0.05 U		200
3-METHYL PHENOL		0.05 U	0.05 U		200
4-METHYL PHENOL		0.05 U	0.05 U		200
PENTACHLOROPHENOL		0.25 U	0.25 U		100
2,4,5-TRICHLOROPHENOL		0.05 U	0.05 U		400
2,4,6-TRICHLOROPHENOL		0.05 U	0.05 U		2

U = NOT DETECTED

PROJECT RECORD

**DATA SUMMARY
ENVIROCHEM TCLP RESULTS
METALS AND INORGANIC PARAMETERS**

	SAMPLE NO. ECC-04A1-PBM-07		ECC-04A1-PBM-08		RCRA TCLP LIMITS
	UNITS	MG/L		MG/L	MG/L
ARSENIC		0.10 U		0.10 U	5
BARIIUM		1.1		1.9	100
CADMIUM		0.0078		0.48	1
CHROMIUM		0.012		0.011	5
COPPER		0.020 U		1.8	25
LEAD		0.050 U		13	5
NICKEL		0.022		0.58	20
SELENIUM		0.10 U		0.10 U	1
SILVER		0.010 U		0.014	5
ZINC		3.4		140	250
MERCURY		0.0050 U		0.0050 U	0.2
CYANIDE		0.25 U		0.41	
SULFIDE		1.0 U		1.0 U	
PERCENT SOLIDS (%)		97		81	
pH (STD UNITS)		7.8		4.1	

U = NOT DETECTED

PROJECT RECORD

C E R T I F I C A T E O F A N A L Y S I S

Service Location HERITAGE LABORATORIES, INC. 301 W. MORRIS ST. INDIANAPOLIS, IN 46231 (317)243-8305	Received	Project	Lab ID
	21-OCT-93	2471	A293882
	Complete	PO Number	
	11-NOV-93	92005 *	
	Printed	Sampled	
	11-NOV-93	20-OCT-93 08:30	

Report To	Bill To
JIM FIFE AWD TECHNOLOGIES, INC. 3553 FOUNDERS RD C/O RESIDENCE INN INDIANAPOLIS, IN 46268	ACCOUNTS PAYABLE AWD TECHNOLOGIES, INC. BUILDING 3, SUITE 300 PENN CENTER WEST PITTSBURGH, PA 15276

Sample Description

SAMPLE DESCRIPTION: ECC-04A1-PBM-07
 LOCATION: ENVIROCHEM

TOTAL SOLIDS EPA 160.3			
Analyst: B. PRIDENORE		Analysis Date: 25-OCT-93	
		Test: G401.7.0	
SOLIDS	Parameter	Result	Det. Limit Units
		97	0.001 Percent

PH (S/S/S) SW846-9045A			
Analyst: C. LADD		Analysis Date: 22-OCT-93	
		Test: G624.0.0	
	Parameter	Result	Det. Limit Units
		7.8	0.10 Std. Units

CYANIDE DISTILLATION SW846-9010A			
Analyst: J. STOAKES		Analysis Date: 25-OCT-93	
		Test: P101.4.0	
INITIAL WEIGHT OR VOLUME	Parameter	Result	Det. Limit Units
FINAL VOLUME		10 250	Grams mL

CYANIDE, TOTAL (AUTOMATED) SW846-9012			
Analyst: B. PENCE		Analysis Date: 25-OCT-93	
Prep: CYANIDE DISTILLATION SW846-9010A P101.4.0		Instrument: AUTO-ANALYZER	
		Test: G101.4.0	
CYANIDE	Parameter	Result	Det. Limit Units
		BDL	0.25 mg/kg

TOTAL AVAILABLE SULFIDE EXTRACTION SW 7.3.4.1			
Analyst: L. WILSON		Analysis Date: 04-NOV-93	
		Test: P116.2.1	
INITIAL WEIGHT OR VOLUME	Parameter	Result	Det. Limit Units
FINAL VOLUME		10 100	Grams mL

SULFIDE SW846-9030A			
Analyst: L. WILSON		Analysis Date: 04-NOV-93	
Prep: TOTAL AVAILABLE SULFIDE EXTRACTION SW 7.3.4.1 P116.2.1		Test: G110.4.1	
SULFIDE	Parameter	Result	Det. Limit Units
		BDL	10.0 mg/kg

PROJECT RECORD

TOX CHAR LEACHING PROCEDURE (TCLP W/ ORGANICS) SW846-1311

Analyst: C. COFFEY

Analysis Date: 25-OCT-93

Test: P107.1.0

Parameter	Result	Det. Limit	Units
TOTAL SAMPLE WEIGHT	100		Grams
LIQUID FRACTION (GRAMS)	0		Grams
EXTRACTED SAMPLE	100		Grams
SOLIDS	100		Percent
9.5 MM SIEVE TEST			Passed
INITIAL PH	8.50		Std. Units
ADJUSTED PH	1.85		Std. Units
BUFFER SOLUTION PH	4.95		Std. Units
FINAL PH	5.09		Std. Units
VOLUME BUFFERED SOLUTION	2000		mL
VOLUME EXTRACT FILTERED	2000		mL
LIQUID FRACTION	0		mL
TOTAL VOLUME FILTRATE	2000		mL
AMBIENT TEMPERATURE	23		Degrees C
INITIAL TIME	08325.1		HRS
FINAL TIME	08341.5		HRS
PHASE 0 VOLUME (REP 0)	NA		mL
PHASE 0 WEIGHT	NA		Grams
PHASE 0 DENSITY	NA		g/mL
PHASE 1 VOLUME (REP 1)	NA		mL
PHASE 1 WEIGHT	NA		Grams
PHASE 1 DENSITY	NA		g/mL

FAA OR ICP ACID DIGESTION (LEACHATE) SW846-3010A

Analyst: R. BYERS

Analysis Date: 27-OCT-93

Test: P130.8.0

Prep: TOX CHAR LEACHING PROCEDURE (TCLP W/ ORGANICS) SW846-1311 P107.1.0

Parameter	Result	Det. Limit	Units
INITIAL WEIGHT OR VOLUME	100		mL
FINAL WEIGHT OR VOLUME	100		mL

ARSENIC ICP (1 POINT MSA) SW846-6010A

Analyst: A. HILSCHER

Analysis Date: 28-OCT-93

Instrument: ICP

Test: M603.7.0

Prep: FAA OR ICP ACID DIGESTION (LEACHATE) SW846-3010A P130.8.0

Prep: TOX CHAR LEACHING PROCEDURE (TCLP W/ ORGANICS) SW846-1311 P107.1.0

Parameter	Result	Det. Limit	Units
ARSENIC	BDL	0.10	mg/L
ADDITION 1	2.00		mg/L
SAMPLE	0.0105		Conc
SAMPLE + ADD 1	2.153		Conc
DILUTION	1		

BARIUM ICP (1 POINT MSA) SW846-6010A

Analyst: A. HILSCHER

Analysis Date: 28-OCT-93

Instrument: ICP

Test: M604.7.0

Prep: FAA OR ICP ACID DIGESTION (LEACHATE) SW846-3010A P130.8.0

Prep: TOX CHAR LEACHING PROCEDURE (TCLP W/ ORGANICS) SW846-1311 P107.1.0

Parameter	Result	Det. Limit	Units
BARIUM	1.1	0.010	mg/L
ADDITION 1	2.0		mg/L
SAMPLE	1.087		Conc
SAMPLE + ADD 1	3.063		Conc
DILUTION	1		

PROJECT RECORD

CADMIUM ICP (1 POINT MSA) SW846-6010A

Analyst: A. NILSCHER Analysis Date: 28-OCT-93 Instrument: ICP Test: M608.7.0
 Prep: FAA OR ICP ACID DIGESTION (LEACHATE) SW846-3010A P130.8.0
 Prep: TOX CHAR LEACHING PROCEDURE (TCLP W/ ORGANICS) SW846-1311 P107.1.0

Parameter	Result	Det. Limit	Units
CADMIUM	0.0078	0.0050	mg/L
ADDITION 1	2.00		mg/L
SAMPLE	0.0078		Conc
SAMPLE + ADD 1	1.905		Conc
DILUTION	1		

CHROMIUM ICP (1 POINT MSA) SW846-6010A

Analyst: A. NILSCHER Analysis Date: 28-OCT-93 Instrument: ICP Test: M610.7.0
 Prep: FAA OR ICP ACID DIGESTION (LEACHATE) SW846-3010A P130.8.0
 Prep: TOX CHAR LEACHING PROCEDURE (TCLP W/ ORGANICS) SW846-1311 P107.1.0

Parameter	Result	Det. Limit	Units
CHROMIUM	0.012	0.010	mg/L
ADDITION 1	2.00		mg/L
SAMPLE	0.0123		Conc
SAMPLE + ADD 1	1.968		Conc
DILUTION	1		

COPPER ICP (1 POINT MSA) SW846-6010A

Analyst: A. NILSCHER Analysis Date: 28-OCT-93 Instrument: ICP Test: M612.7.0
 Prep: FAA OR ICP ACID DIGESTION (LEACHATE) SW846-3010A P130.8.0
 Prep: TOX CHAR LEACHING PROCEDURE (TCLP W/ ORGANICS) SW846-1311 P107.1.0

Parameter	Result	Det. Limit	Units
COPPER	BDL	0.020	mg/L
ADDITION 1	2.00		mg/L
SAMPLE	0.0075		Conc
SAMPLE + ADD 1	2.031		Conc
DILUTION	1		

LEAD ICP (1 POINT MSA) SW846-6010A

Analyst: A. NILSCHER Analysis Date: 28-OCT-93 Instrument: ICP Test: M616.7.0
 Prep: FAA OR ICP ACID DIGESTION (LEACHATE) SW846-3010A P130.8.0
 Prep: TOX CHAR LEACHING PROCEDURE (TCLP W/ ORGANICS) SW846-1311 P107.1.0

Parameter	Result	Det. Limit	Units
LEAD	BDL	0.050	mg/L
ADDITION 1	2.00		mg/L
SAMPLE	0.0372		Conc
SAMPLE + ADD 1	1.927		Conc
DILUTION	1		

NICKEL ICP (1 POINT MSA) SW846-6010A

Analyst: A. NILSCHER Analysis Date: 28-OCT-93 Instrument: ICP Test: M622.7.0
 Prep: FAA OR ICP ACID DIGESTION (LEACHATE) SW846-3010A P130.8.0
 Prep: TOX CHAR LEACHING PROCEDURE (TCLP W/ ORGANICS) SW846-1311 P107.1.0

Parameter	Result	Det. Limit	Units
NICKEL	0.022	0.010	mg/L
ADDITION 1	2.00		mg/L
SAMPLE	0.0221		Conc
SAMPLE + ADD 1	1.915		Conc
DILUTION	1		

SELENIUM ICP (1 POINT MSA) SW846-6010A

Analyst: A. HILSCHER Analysis Date: 28-OCT-93 Instrument: ICP

Test: M628.7.0

Prep: FAA OR ICP ACID DIGESTION (LEACHATE) SW846-3010A P130.8.0

Prep: TOX CHAR LEACHING PROCEDURE (TCLP W/ ORGANICS) SW846-1311 P107.1.0

Parameter	Result	Det. Limit	Units
SELENIUM	BDL	0.10	mg/L
ADDITION 1	2.000		mg/L
SAMPLE	0.0748		Conc
SAMPLE + ADD 1	2.296		Conc
DILUTION	1		

SILVER ICP (1 POINT MSA) SW846-6010A

Analyst: A. HILSCHER Analysis Date: 28-OCT-93 Instrument: ICP

Test: M630.7.0

Prep: FAA OR ICP ACID DIGESTION (LEACHATE) SW846-3010A P130.8.0

Prep: TOX CHAR LEACHING PROCEDURE (TCLP W/ ORGANICS) SW846-1311 P107.1.0

Parameter	Result	Det. Limit	Units
SILVER	BDL	0.010	mg/L
ADDITION 1	0.400		mg/L
SAMPLE	0.0018		Conc
SAMPLE + ADD 1	0.3892		Conc
DILUTION	1		

ZINC ICP (1 POINT MSA) SW846-6010A

Analyst: A. STOCKBURGER Analysis Date: 05-NOV-93 Instrument: ICP

Test: M639.7.0

Prep: FAA OR ICP ACID DIGESTION (LEACHATE) SW846-3010A P130.8.0

Prep: TOX CHAR LEACHING PROCEDURE (TCLP W/ ORGANICS) SW846-1311 P107.1.0

Parameter	Result	Det. Limit	Units
ZINC	4.2	0.20	mg/L
ADDITION 1	2.000		mg/L
SAMPLE	0.4175		Conc
SAMPLE + ADD 1	2.439		Conc
DILUTION	10		

MERCURY CVAA ACID DIGESTION (LEACHATE) SW846-7470

Analyst: G. MAPP Analysis Date: 26-OCT-93

Test: P131.9.0

Prep: TOX CHAR LEACHING PROCEDURE (TCLP W/ ORGANICS) SW846-1311 P107.1.0

Parameter	Result	Det. Limit	Units
INITIAL WEIGHT OR VOLUME	10		mL
FINAL VOLUME	100		mL

MERCURY CVAA (1 POINT MSA) SW846-7470

Analyst: G. MAPP Analysis Date: 27-OCT-93 Instrument: CVAA

Test: M620.6.0

Prep: MERCURY CVAA ACID DIGESTION (LEACHATE) SW846-7470 P131.9.0

Prep: TOX CHAR LEACHING PROCEDURE (TCLP W/ ORGANICS) SW846-1311 P107.1.0

Parameter	Result	Det. Limit	Units
MERCURY	BDL	0.0050	mg/L
ADDITION 1	0.0010		mg/L
SAMPLE	0.000		Conc
SAMPLE + ADD 1	0.00103		Conc
DILUTION	1		

GC/MS SEPARATORY FUNNEL LIQUID-LIQUID EXTRACTION SW846-3510A

Analyst: J. KOCH Analysis Date: 27-OCT-93

Test: P233.4.0

Prep: TOX CHAR LEACHING PROCEDURE (TCLP W/ ORGANICS) SW846-1311 P107.1.0

Parameter	Result	Det. Limit	Units
INITIAL WEIGHT OR VOLUME	200		mL
FINAL VOLUME	1.0		mL

TCLP SEMIVOLATILE ORGANICS (TOXICITY CHARACTERISTIC) SW846-8270A			
Analyst: G. BARRETT		Analysis Date: 27-OCT-93 19:23 Instrument: GC/MS SVGA	
Rep: GC/MS SEPARATORY FUNNEL LIQUID-LIQUID EXTRACTION SW846-3510A P233.4.0		Test: 0514.3.0	
Prep: TOX CHAR LEACHING PROCEDURE (TCLP W/ ORGANICS) SW846-1311 P107.1.0			
Parameter	Result	Det. Limit	Units
1,4-DICHLOROBENZENE	BDL	50	ug/L
2,4-DINITROTOLUENE	BDL	50	ug/L
HEXACHLOROBENZENE	BDL	50	ug/L
HEXACHLOROBUTADIENE	BDL	50	ug/L
HEXACHLOROETHANE	BDL	50	ug/L
NITROBENZENE	BDL	50	ug/L
PYRIDINE	BDL	250	ug/L
2-METHYL PHENOL	BDL	50	ug/L
3-METHYL PHENOL	BDL	50	ug/L
4-METHYLPHENOL	BDL	50	ug/L
PENTACHLOROPHENOL	BDL	250	ug/L
2,4,5-TRICHLOROPHENOL	BDL	50	ug/L
2,4,6-TRICHLOROPHENOL	BDL	50	ug/L
SURROGATE RECOVERY			

2-FLUOROPHENOL	60		% Rec
PHENOL-D5	42		% Rec
NITROBENZENE-D5	87		% Rec
2-FLUOROBIPHENYL	94		% Rec
2,4,6-TRIBROMOPHENOL	95		% Rec
TRIPHENYL-D14	92		% Rec

PROJECT RECORD

ZERO HEADSPACE EXTRACTION (TCLP) SW846-1311			
Analyst: J. KOCH		Analysis Date: 25-OCT-93	
Test: P108.1.0			
Parameter	Result	Det. Limit	Units
TOTAL SAMPLE WEIGHT	25.0		Grams
LIQUID FRACTION (GRAMS)	NA		Grams
LIQUID PORTION	NA		mL
EXTRACTED SAMPLE	25.0		Grams
PHASE ONE VOLUME (REP 0)	426.1		mL
PHASE TWO VOLUME (REP 1)	NA		mL

TCLP VOLATILE ORGANICS (TOXICITY CHARACTERISTIC) SW846-8240A			
Analyst: R. SHAMP		Analysis Date: 27-OCT-93 11:30 Instrument: GC/MS VOA	
Prep: ZERO HEADSPACE EXTRACTION (TCLP) SW846-1311 P108.1.0			
Test: 0513.3.0			
Parameter	Result	Det. Limit	Units
BENZENE	BDL	50	ug/L
CARBON TETRACHLORIDE	BDL	50	ug/L
CHLOROBENZENE	BDL	50	ug/L
CHLOROFORM	BDL	50	ug/L
1,2-DICHLOROETHANE	BDL	50	ug/L
1,1-DICHLOROETHYLENE	BDL	50	ug/L
METHYL ETHYL KETONE	BDL	100	ug/L
TETRACHLOROETHYLENE	BDL	50	ug/L
TRICHLOROETHYLENE	BDL	50	ug/L
VINYL CHLORIDE	BDL	100	ug/L
SURROGATE RECOVERY			

DICHLOROETHANE-D4	123		% Rec
TOLUENE-D8	101		% Rec

Parameter	Result	Det. Limit	Units % Rec
BROMOFLUOROBENZENE 10 DILUTION.	94		

Sample Comments

SAMPLE WILL BE RE-CHECKED FOR SELENIUM, ZINC AND SULFIDE BECAUSE OF POSSIBLE QC QUESTIONS.

BDL Below Detection Limit
NA Not Applicable

Sample chain of custody number 14519.

This Certificate shall not be reproduced, except in full, without the written approval of the lab.

PROJECT RECORD

Quality Assurance Officer: _____



C E R T I F I C A T E O F A N A L Y S I S

Service Location HERITAGE LABORATORIES, INC. 901 W. MORRIS ST. INDIANAPOLIS, IN 46231 (317)243-8305	Received 21-OCT-93	Project 2471	Lab ID A293883
	Complete 11-NOV-93	PO Number 92005 *	
	Printed 11-NOV-93	Sampled 20-OCT-93 08:45	

Report To JIM FIFE AWD TECHNOLOGIES, INC. 3553 FOUNDERS RD C/O RESIDENCE INN INDIANAPOLIS, IN 46268	Bill To ACCOUNTS PAYABLE AWD TECHNOLOGIES, INC. BUILDING 3, SUITE 300 PENN CENTER WEST PITTSBURGH, PA 15276
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Sample Description

SAMPLE DESCRIPTION: ECC-04A1-PBM-08
 LOCATION: ENVIROCHEM

TOTAL SOLIDS EPA 160.3 Analyst: B. PRIDEMORE Analysis Date: 25-OCT-93 Test: G401.7.0			
SOLIDS Parameter	81 Result	0.001 Det. Limit	Percent Units

PH (S/S/S) SW846-9045A Analyst: C. LADD Analysis Date: 22-OCT-93 Test: G624.0.0			
PH Parameter	4.1 Result	0.10 Det. Limit	Std. Units Units

CYANIDE DISTILLATION SW846-9010A Analyst: J. STOAKES Analysis Date: 25-OCT-93 Test: P101.4.0			
INITIAL WEIGHT OR VOLUME Parameter	10 Result	Det. Limit	Grams Units
FINAL VOLUME Parameter	250 Result	Det. Limit	mL Units

CYANIDE, TOTAL (AUTOMATED) SW846-9012 Analyst: B. PENCE Analysis Date: 25-OCT-93 Instrument: AUTO-ANALYZER Test: G101.4.0 Prep: CYANIDE DISTILLATION SW846-9010A P101.4.0			
CYANIDE Parameter	0.41 Result	0.25 Det. Limit	mg/kg Units

TOTAL AVAILABLE SULFIDE EXTRACTION SW 7.3.4.1 Analyst: L. WILSON Analysis Date: 04-NOV-93 Test: P116.2.1			
INITIAL WEIGHT OR VOLUME Parameter	10 Result	Det. Limit	Grams Units
FINAL VOLUME Parameter	100 Result	Det. Limit	mL Units

SULFIDE SW846-9030A Analyst: L. WILSON Analysis Date: 04-NOV-93 Test: G110.4.1 Prep: TOTAL AVAILABLE SULFIDE EXTRACTION SW 7.3.4.1 P116.2.1			
SULFIDE Parameter	BDL Result	10 Det. Limit	mg/kg Units

PROJECT RECORD

TOX CHAR LEACHING PROCEDURE (TCLP W/ ORGANICS) SW846-1311

Analyst: C. COFFEY

Analysis Date: 25-OCT-93

Test: P107.1.0

Parameter	Result	Det. Limit	Units
TOTAL SAMPLE WEIGHT	100		Grams
LIQUID FRACTION (GRAMS)	0		Grams
EXTRACTED SAMPLE	100		Grams
SOLIDS	100		Percent
9.5 MM SIEVE TEST			Passed
INITIAL PH	4.56		Std. Units
ADJUSTED PH	NA		Std. Units
BUFFER SOLUTION PH	4.95		Std. Units
FINAL PH	4.76		Std. Units
VOLUME BUFFERED SOLUTION	2000		mL
VOLUME EXTRACT FILTERED	2000		mL
LIQUID FRACTION	0		mL
TOTAL VOLUME FILTRATE	2000		mL
AMBIENT TEMPERATURE	23		Degrees C
INITIAL TIME	08325.1		HRS
FINAL TIME	08341.5		HRS
PHASE 0 VOLUME (REP 0)	NA		mL
PHASE 0 WEIGHT	NA		Grams
PHASE 0 DENSITY	NA		g/mL
PHASE 1 VOLUME (REP 1)	NA		mL
PHASE 1 WEIGHT	NA		Grams
PHASE 1 DENSITY	NA		g/mL

FAA OR ICP ACID DIGESTION (LEACHATE) SW846-3010A

Analyst: R. BYERS

Analysis Date: 27-OCT-93

Test: P130.8.0

Prep: TOX CHAR LEACHING PROCEDURE (TCLP W/ ORGANICS) SW846-1311 P107.1.0

Parameter	Result	Det. Limit	Units
INITIAL WEIGHT OR VOLUME	100		mL
FINAL WEIGHT OR VOLUME	100		mL

ARSENIC ICP (1 POINT MSA) SW846-6010A

Analyst: A. NILSCHER

Analysis Date: 28-OCT-93

Instrument: ICP

Test: M603.7.0

Prep: FAA OR ICP ACID DIGESTION (LEACHATE) SW846-3010A P130.8.0

Prep: TOX CHAR LEACHING PROCEDURE (TCLP W/ ORGANICS) SW846-1311 P107.1.0

Parameter	Result	Det. Limit	Units
ARSENIC	BDL	0.10	mg/L
ADDITION 1	2.00		mg/L
SAMPLE	0.0284		Conc
SAMPLE + ADD 1	2.125		Conc
DILUTION	1		

BARIUM ICP (1 POINT MSA) SW846-6010A

Analyst: A. NILSCHER

Analysis Date: 28-OCT-93

Instrument: ICP

Test: M604.7.0

Prep: FAA OR ICP ACID DIGESTION (LEACHATE) SW846-3010A P130.8.0

Prep: TOX CHAR LEACHING PROCEDURE (TCLP W/ ORGANICS) SW846-1311 P107.1.0

Parameter	Result	Det. Limit	Units
BARIUM	1.9	0.010	mg/L
ADDITION 1	2.00		mg/L
SAMPLE	1.871		Conc
SAMPLE + ADD 1	3.789		Conc
DILUTION	1		

PROJECT RECORD

CADMIUM ICP (1 POINT MSA) SW846-6010A

Analyst: A. HILSCHER Analysis Date: 28-OCT-93 Instrument: ICP
 Prep: FAA OR ICP ACID DIGESTION (LEACHATE) SW846-3010A P130.8.0
 Prep: TOX CHAR LEACHING PROCEDURE (TCLP W/ ORGANICS) SW846-1311 P107.1.0

Test: M608.7.0

Parameter	Result	Det. Limit	Units
CADMIUM	0.48	0.0050	mg/L
ADDITION 1	2.0		mg/L
SAMPLE	0.4763		Conc
SAMPLE + ADD 1	2.277		Conc
DILUTION	1		

CHROMIUM ICP (1 POINT MSA) SW846-6010A

Analyst: A. HILSCHER Analysis Date: 28-OCT-93 Instrument: ICP
 Prep: FAA OR ICP ACID DIGESTION (LEACHATE) SW846-3010A P130.8.0
 Prep: TOX CHAR LEACHING PROCEDURE (TCLP W/ ORGANICS) SW846-1311 P107.1.0

Test: M610.7.0

Parameter	Result	Det. Limit	Units
CHROMIUM	0.011	0.010	mg/L
ADDITION 1	2.00		mg/L
SAMPLE	0.0106		Conc
SAMPLE + ADD 1	1.883		Conc
DILUTION	1		

COPPER ICP (1 POINT MSA) SW846-6010A

Analyst: A. HILSCHER Analysis Date: 28-OCT-93 Instrument: ICP
 Prep: FAA OR ICP ACID DIGESTION (LEACHATE) SW846-3010A P130.8.0
 Prep: TOX CHAR LEACHING PROCEDURE (TCLP W/ ORGANICS) SW846-1311 P107.1.0

Test: M612.7.0

Parameter	Result	Det. Limit	Units
COPPER	1.8	0.020	mg/L
ADDITION 1	2.00		mg/L
SAMPLE	1.771		Conc
SAMPLE + ADD 1	3.743		Conc
DILUTION	1		

LEAD ICP (1 POINT MSA) SW846-6010A

Analyst: A. HILSCHER Analysis Date: 28-OCT-93 Instrument: ICP
 Prep: FAA OR ICP ACID DIGESTION (LEACHATE) SW846-3010A P130.8.0
 Prep: TOX CHAR LEACHING PROCEDURE (TCLP W/ ORGANICS) SW846-1311 P107.1.0

Test: M616.7.0

Parameter	Result	Det. Limit	Units
LEAD	13	0.050	mg/L
ADDITION 1	2.00		mg/L
SAMPLE	12.86		Conc
SAMPLE + ADD 1	14.62		Conc
DILUTION	1		

NICKEL ICP (1 POINT MSA) SW846-6010A

Analyst: A. HILSCHER Analysis Date: 28-OCT-93 Instrument: ICP
 Prep: FAA OR ICP ACID DIGESTION (LEACHATE) SW846-3010A P130.8.0
 Prep: TOX CHAR LEACHING PROCEDURE (TCLP W/ ORGANICS) SW846-1311 P107.1.0

Test: M622.7.0

Parameter	Result	Det. Limit	Units
NICKEL	0.58	0.010	mg/L
ADDITION 1	2.00		mg/L
SAMPLE	0.584		Conc
SAMPLE + ADD 1	2.389		Conc
DILUTION	1		

PROJECT RECORD

SELENIUM ICP (1 POINT MSA) SW846-6010A			
Analyst: A. MILSCHER		Analysis Date: 28-OCT-93	Instrument: ICP
			Test: M628.7.0
Prep: FAA OR ICP ACID DIGESTION (LEACHATE) SW846-3010A P130.8.0			
Prep: TOX CHAR LEACHING PROCEDURE (TCLP W/ ORGANICS) SW846-1311 P107.1.0			
Parameter	Result	Det. Limit	Units
SELENIUM	BDL	0.10	mg/L
ADDITION 1	2.00		mg/L
SAMPLE	0.0922		Conc
SAMPLE + ADD 1	2.376		Conc
DILUTION	1		

SILVER ICP (1 POINT MSA) SW846-6010A			
Analyst: A. MILSCHER		Analysis Date: 28-OCT-93	Instrument: ICP
			Test: M630.7.0
Prep: FAA OR ICP ACID DIGESTION (LEACHATE) SW846-3010A P130.8.0			
Prep: TOX CHAR LEACHING PROCEDURE (TCLP W/ ORGANICS) SW846-1311 P107.1.0			
Parameter	Result	Det. Limit	Units
SILVER	0.014	0.010	mg/L
ADDITION 1	0.400		mg/L
SAMPLE	0.0141		Conc
SAMPLE + ADD 1	0.3984		Conc
DILUTION	1		

ZINC ICP (1 POINT MSA) SW846-6010A			
Analyst: A. STOCKBURGER		Analysis Date: 05-NOV-93	Instrument: ICP
			Test: M639.7.0
Prep: FAA OR ICP ACID DIGESTION (LEACHATE) SW846-3010A P130.8.0			
Prep: TOX CHAR LEACHING PROCEDURE (TCLP W/ ORGANICS) SW846-1311 P107.1.0			
Parameter	Result	Det. Limit	Units
ZINC	170	0.20	mg/L
ADDITION 1	2.000		mg/L
SAMPLE	16.93		Conc
SAMPLE + ADD 1	18.95		Conc
DILUTION	10		

MERCURY CVAA ACID DIGESTION (LEACHATE) SW846-7470			
Analyst: G. MAPP		Analysis Date: 26-OCT-93	Instrument: CVAA
			Test: P131.9.0
Prep: TOX CHAR LEACHING PROCEDURE (TCLP W/ ORGANICS) SW846-1311 P107.1.0			
Parameter	Result	Det. Limit	Units
INITIAL WEIGHT OR VOLUME	10		mL
FINAL VOLUME	100		mL

MERCURY CVAA (1 POINT MSA) SW846-7470			
Analyst: G. MAPP		Analysis Date: 27-OCT-93	Instrument: CVAA
			Test: M620.6.0
Prep: MERCURY CVAA ACID DIGESTION (LEACHATE) SW846-7470 P131.9.0			
Prep: TOX CHAR LEACHING PROCEDURE (TCLP W/ ORGANICS) SW846-1311 P107.1.0			
Parameter	Result	Det. Limit	Units
MERCURY	BDL	0.0050	mg/L
ADDITION 1	0.0010		mg/L
SAMPLE	0.000		Conc
SAMPLE + ADD 1	0.00106		Conc
DILUTION	1		

GC/MS SEPARATORY FUNNEL LIQUID-LIQUID EXTRACTION SW846-3510A			
Analyst: J. KOCH		Analysis Date: 27-OCT-93	Instrument: GC/MS
			Test: P233.4.0
Prep: TOX CHAR LEACHING PROCEDURE (TCLP W/ ORGANICS) SW846-1311 P107.1.0			
Parameter	Result	Det. Limit	Units
INITIAL WEIGHT OR VOLUME	200		mL
FINAL VOLUME	1.0		mL

PROJECT RECORD

TCLP SEMIVOLATILE ORGANICS (TOXICITY CHARACTERISTIC) SW846-8270A			
Analyst: G. BARRETT		Analysis Date: 27-OCT-93 20:13 Instrument: GC/MS SYOA	
Prep: GC/MS SEPARATORY FUNNEL LIQUID-LIQUID EXTRACTION SW846-3510A P233.4.0		Test: 0514.3.0	
Prep: TOX CHAR LEACHING PROCEDURE (TCLP W/ ORGANICS) SW846-1311 P107.1.0			
Parameter	Result	Det. Limit	Units
1,4-DICHLOROBENZENE	BDL	50	ug/L
2,4-DINITROTOLUENE	BDL	50	ug/L
HEXACHLOROBENZENE	BDL	50	ug/L
HEXACHLOROBUTADIENE	BDL	50	ug/L
HEXACHLOROETHANE	BDL	50	ug/L
NITROBENZENE	BDL	50	ug/L
PYRIDINE	BDL	250	ug/L
2-METHYL PHENOL	BDL	50	ug/L
3-METHYL PHENOL	BDL	50	ug/L
4-METHYLPHENOL	BDL	50	ug/L
PENTACHLOROPHENOL	BDL	250	ug/L
2,4,5-TRICHLOROPHENOL	BDL	50	ug/L
2,4,6-TRICHLOROPHENOL	BDL	50	ug/L
SURROGATE RECOVERY			

2-FLUOROPHENOL	57		% Rec
PHENOL-D5	43		% Rec
NITROBENZENE-D5	90		% Rec
2-FLUOROBIPHENYL	92		% Rec
2,4,6-TRIBROMOPHENOL	104		% Rec
TFRPHENYL-D14	95		% Rec

PROJECT RECORD

ZERO HEADSPACE EXTRACTION (TCLP) SW846-1311			
Analyst: J. KOCH		Analysis Date: 25-OCT-93	
Test: P108.1.0			
Parameter	Result	Det. Limit	Units
TOTAL SAMPLE WEIGHT	25.0		Grams
LIQUID FRACTION (GRAMS)	NA		Grams
LIQUID PORTION	NA		mL
EXTRACTED SAMPLE	25.0		Grams
PHASE ONE VOLUME (REP 0)	434.5		mL
PHASE TWO VOLUME (REP 1)	NA		mL

TCLP VOLATILE ORGANICS (TOXICITY CHARACTERISTIC) SW846-8240A			
Analyst: R. SHAMP		Analysis Date: 27-OCT-93 12:17 Instrument: GC/MS VOA	
Prep: ZERO HEADSPACE EXTRACTION (TCLP) SW846-1311 P108.1.0			
Parameter	Result	Det. Limit	Units
BENZENE	BDL	50	ug/L
CARBON TETRACHLORIDE	BDL	50	ug/L
CHLOROBENZENE	BDL	50	ug/L
CHLOROFORM	BDL	50	ug/L
1,2-DICHLOROETHANE	BDL	50	ug/L
1,1-DICHLOROETHYLENE	BDL	50	ug/L
METHYL ETHYL KETONE	BDL	100	ug/L
TETRACHLOROETHYLENE	BDL	50	ug/L
TRICHLOROETHYLENE	BDL	50	ug/L
VINYL CHLORIDE	BDL	100	ug/L
SURROGATE RECOVERY			

DICHLOROETHANE-D4	118		% Rec
TOLUENE-D8	106		% Rec

Parameter	Result	Det. Limit	Units % Rec
BROMOFLUOROBENZENE 10 DILUTION.	94		

Sample Comments

SAMPLE WILL BE RE-CHECKED FOR SELENIUM, ZINC AND SULFIDE BECAUSE OF POSSIBLE QC QUESTIONS.

BDL Below Detection Limit

NA Not Applicable

Sample chain of custody number 14519.

This Certificate shall not be reproduced, except in full, without the written approval of the lab.

PROJECT RECORD



Quality Assurance Officer: _____

QUALITY ASSURANCE REPORT

Service Location HERITAGE LABORATORIES, INC. 901 W. MORRIS ST. INDIANAPOLIS, IN 46231 (317)243-8305	Received	Lab ID
	21-OCT-93	A293882
	Complete	PO Number
	11-NOV-93	92005 *
	Printed	Sampled
	16-NOV-93	20-OCT-93 08:30

Sample Description

SAMPLE DESCRIPTION: ECC-04A1-PBM-07
LOCATION: ENVIROCHEM

TOTAL SOLIDS EPA 160.3									
Analyst : B. PRIDEMORE			Analysis Date: 25-OCT-93			Test: G401.7.0			
Reviewer: P. ANDERSON			Review Date: 27-OCT-93			File ID: 3538-3540			
						Run: R200545			
QC Type	Identifier	Source	Parameter	True/Sampl	Spike Val	Observed	Units	% Rec	RPD
DUP01	Q811640	A293882	SOLIDS	97		97	Percent		0
LCS01	Q811639		SOLIDS	9.6045		9.604	Percent	100	
SAMPLE	A293882		See Certificate of Analysis						
LCS01	Q811643		SOLIDS	12.6553		12.6552	Percent	100	

PH (S/S/S) SW846-9045A									
Analyst : C. LADD			Analysis Date: 22-OCT-93			Test: G624.0.0			
Reviewer: S. CARDWELL			Review Date: 25-OCT-93			File ID:			
						Run: R200221			
QC Type	Identifier	Source	Parameter	True/Sampl	Spike Val	Observed	Units	% Rec	RPD
ICV01	Q809522		PH	4		4.04	Std. Units	101	
DUP01	Q809524	A293982	PH	7.6		7.6	Std. Units		0
	Q809523		PH	7		7.04	Std. Units	100.6	
SAMPLE	A293882		See Certificate of Analysis						
CCV	Q809525		PH	7		7.04	Std. Units	100.6	

CYANIDE, TOTAL (AUTOMATED) SW846-9012										
Analyst : B. PENCE			Analysis Date: 25-OCT-93			Instrument: AUTO-ANALYZER		Test: G101.4.0		
Reviewer: B. SHRAKE			Review Date: 26-OCT-93			File ID: 1056		Run: R200398		
Prep: CYANIDE DISTILLATION SW846-9010A										
QC Type	Identifier	Source	Parameter	True/Sampl	Spike Val	Observed	Units	% Rec	RPD	
ICV01	Q810722		CYANIDE	.212		.208	mg/L	96.1		
ICV01	Q810724		CYANIDE	.212		.207	mg/L	97.6		
ICV01	Q810746		CYANIDE	.212		.202	mg/L	95.3		
SP102	Q810737	A293818	CYANIDE	0	2.5	.577	mg/kg	23.1		
DPS02	Q810739	A293728	CYANIDE	0	.1	.087	mg/L	87	3.4	
DUP02	Q810736	A293882	CYANIDE	.25		< .25	mg/kg		0	
CDL01	Q810721		CYANIDE	.01		.011	mg/L	110		
CCV	Q810732		CYANIDE	.1		.108	mg/L	108		
BLA01	Q810733		CYANIDE			.003	mg/L			
BLA02	Q810726		CYANIDE			.003	mg/L			
LCS	Q810727		CYANIDE	.3		.259	mg/L	86.3		
SAMPLE	A293882		See Certificate of Analysis							
CCV	Q810734		CYANIDE	.1		.101	mg/L	101		
BLA01	Q810735		CYANIDE			.003	mg/L			
BLA02	Q810728		CYANIDE			.003	mg/L			
LCS	Q810731		CYANIDE	.3		.284	mg/L	94.7		

Comments

0737 SAMPLE EXHIBITS LOW SPIKE RECOVERY. THE SAMPLE AND SPIKE WERE
 310737 DUPLICATED AND THE SAME LOW RECOVERY WAS OBTAINED.

SULFIDE SW846-9030A

Analyst : L. WILSON

Analysis Date: 04-NOV-93

Test: G110.4.1

viewer: B. SHRAKE

Review Date: 05-NOV-93 File ID: 1531-1533

Run: R201341

Prep: TOTAL AVAILABLE SULFIDE EXTRACTION SW 7.3.4.1

QC Type	Identifier	Source	Parameter	True/Sampl	Spike Val	Observed	Units	% Rec	RPD
SP101	Q818051	A295696	SULFIDE	0	34.4	32.4	mg/L	94.2	
DUP01	Q818050	A295695	SULFIDE	0		BDL	mg/L		
DUP02	Q818052	H119257	SULFIDE	0		BDL	mg/kg		
BLA01	Q818048		SULFIDE			.0389	mg/L		
LCS01	Q818049		SULFIDE	68.8		68.5	mg/L	99.6	
SAMPLE	A293882		See Certificate of Analysis						
LCS	Q818053		SULFIDE	68.8		58.8	mg/L	85.5	

ARSENIC ICP (1 POINT MSA) SW846-6010A

Analyst : A. HILSCHER

Analysis Date: 28-OCT-93 Instrument: ICP

Test: M603.7.0

Reviewer: S. ENDERSEN

Review Date: 03-NOV-93 File ID: 026280

Run: R201075

Prep: FAA OR ICP ACID DIGESTION (LEACHATE) SW846-3010A

Prep: TOX CHAR LEACHING PROCEDURE (TCLP W/ ORGANICS) SW846-1311

QC Type	Identifier	Source	Parameter	True/Sampl	Spike Val	Observed	Units	% Rec	RPD
ICV01	Q815970		ARSENIC	.4		.429	mg/L	107.3	
DUP02	Q809850	A293883	ARSENIC	0		BDL	mg/L		0
CCV	Q815974		ARSENIC	5		5.14	mg/L	102.8	
BLA01	Q815975		ARSENIC			< .04	mg/L		
LCS	Q809846		ARSENIC	20		18.9	mg/L	94.5	
BLA02	Q809847		ARSENIC			< .04	mg/L		
SAMPLE	A293882		See Certificate of Analysis						
CCV	Q815976		ARSENIC	5		5.21	mg/L	104.2	
11	Q815977		ARSENIC			< .04	mg/L		

BARIUM ICP (1 POINT MSA) SW846-6010A

Analyst : A. HILSCHER

Analysis Date: 28-OCT-93 Instrument: ICP

Test: M604.7.0

Reviewer: S. ENDERSEN

Review Date: 03-NOV-93 File ID: 026280

Run: R201075

Prep: FAA OR ICP ACID DIGESTION (LEACHATE) SW846-3010A

Prep: TOX CHAR LEACHING PROCEDURE (TCLP W/ ORGANICS) SW846-1311

QC Type	Identifier	Source	Parameter	True/Sampl	Spike Val	Observed	Units	% Rec	RPD
ICV01	Q815923		BARIUM	2		2.03	mg/L	101.5	
DUP02	Q809850	A293883	BARIUM	1.87		1.86	mg/L		.5
CCV	Q815941		BARIUM	5		4.91	mg/L	98.2	
BLA01	Q815942		BARIUM			< .004	mg/L		
LCS	Q809846		BARIUM	20		18.8	mg/L	94	
BLA02	Q809847		BARIUM			< .004	mg/L		
SAMPLE	A293882		See Certificate of Analysis						
CCV	Q815943		BARIUM	5		4.97	mg/L	99.4	
BLA01	Q815944		BARIUM			< .004	mg/L		

CADMIUM ICP (1 POINT MSA) SW846-6010A

Analyst : A. HILSCHER

Analysis Date: 28-OCT-93 Instrument: ICP

Test: M608.7.0

Reviewer: S. ENDERSEN

Review Date: 03-NOV-93 File ID: 026280

Run: R201075

Prep: FAA OR ICP ACID DIGESTION (LEACHATE) SW846-3010A

Prep: TOX CHAR LEACHING PROCEDURE (TCLP W/ ORGANICS) SW846-1311

QC Type	Identifier	Source	Parameter	True/Sampl	Spike Val	Observed	Units	% Rec	RPD
ICV01	Q815945		CADMIUM	.4		.422	mg/L	105.5	
DUP02	Q809850	A293883	CADMIUM	.476		.475	mg/L		.2
CCV	Q815948		CADMIUM	5		4.92	mg/L	98.4	
BLA01	Q815949		CADMIUM			< .002	mg/L		
LCS	Q809846		CADMIUM	.5		.456	mg/L	91.2	
BLA02	Q809847		CADMIUM			< .002	mg/L		
SAMPLE	A293882		See Certificate of Analysis						

QC Type	Identifier	Source	Parameter	True/Sampl	Spike Val	Observed	Units	% Rec	RPD
CCV	0815950		CADMIUM	5		5.03	mg/L	100.6	
1	0815951		CADMIUM			< .002	mg/L		

CHROMIUM ICP (1 POINT MSA) SW846-6010A

Analyst : A. NILSCHER Analysis Date: 28-OCT-93 Instrument: ICP Test: M610.7.0
 Reviewer: S. ENDERSEN Review Date: 03-NOV-93 File ID: 026280 Run: R201075
 Prep: FAA OR ICP ACID DIGESTION (LEACHATE) SW846-3010A
 Prep: TOX CHAR LEACHING PROCEDURE (TCLP W/ ORGANICS) SW846-1311

QC Type	Identifier	Source	Parameter	True/Sampl	Spike Val	Observed	Units	% Rec	RPD
ICV01	0815952		CHROMIUM	.4		.408	mg/L	102	
DUP02	0809850	A293883	CHROMIUM	.0106		.0088	mg/L		18.6
CCV	0815955		CHROMIUM	5		4.99	mg/L	99.8	
BLA01	0815956		CHROMIUM			.0044	mg/L		
LCS	0809846		CHROMIUM	2		1.86	mg/L	93	
BLA02	0809847		CHROMIUM			< .004	mg/L		
SAMPLE	A293882		See Certificate of Analysis						
CCV	0815957		CHROMIUM	5		5.09	mg/L	101.8	
BLA01	0815958		CHROMIUM			< .004	mg/L		

COPPER ICP (1 POINT MSA) SW846-6010A

Analyst : A. NILSCHER Analysis Date: 28-OCT-93 Instrument: ICP Test: M612.7.0
 Reviewer: S. ENDERSEN Review Date: 03-NOV-93 File ID: 026280 Run: R201075
 Prep: FAA OR ICP ACID DIGESTION (LEACHATE) SW846-3010A
 Prep: TOX CHAR LEACHING PROCEDURE (TCLP W/ ORGANICS) SW846-1311

QC Type	Identifier	Source	Parameter	True/Sampl	Spike Val	Observed	Units	% Rec	RPD
ICV01	0815986		COPPER	.4		.408	mg/L	102	
02	0809850	A293883	COPPER	1.77		1.74	mg/L		1.7
	0816005		COPPER	5		4.96	mg/L	99.2	
A01	0816006		COPPER			.0124	mg/L		
LCS	0809846		COPPER	2.5		2.29	mg/L	91.6	
BLA02	0809847		COPPER			< .008	mg/L		
SAMPLE	A293882		See Certificate of Analysis						
CCV	0816007		COPPER	5		5.01	mg/L	100.2	
BLA01	0816008		COPPER			< .008	mg/L		

LEAD ICP (1 POINT MSA) SW846-6010A

Analyst : A. NILSCHER Analysis Date: 28-OCT-93 Instrument: ICP Test: M616.7.0
 Reviewer: S. ENDERSEN Review Date: 03-NOV-93 File ID: 026280 Run: R201075
 Prep: FAA OR ICP ACID DIGESTION (LEACHATE) SW846-3010A
 Prep: TOX CHAR LEACHING PROCEDURE (TCLP W/ ORGANICS) SW846-1311

QC Type	Identifier	Source	Parameter	True/Sampl	Spike Val	Observed	Units	% Rec	RPD
ICV01	0815963		LEAD	.4		.402	mg/L	100.5	
DUP02	0809850	A293883	LEAD	12.9		12.8	mg/L		.8
CCV	0815966		LEAD	5		4.99	mg/L	99.8	
BLA01	0815967		LEAD			< .02	mg/L		
LCS	0809846		LEAD	5		4.54	mg/L	90.8	
BLA02	0809847		LEAD			< .02	mg/L		
SAMPLE	A293882		See Certificate of Analysis						
CCV	0815968		LEAD	5		5.07	mg/L	101.4	
BLA01	0815969		LEAD			< .02	mg/L		

PROJECT RECORD

NICKEL ICP (1 POINT MSA) SW846-6010A

Analyst : A. HILSCHER Analysis Date: 28-OCT-93 Instrument: ICP Test: M622.7.0
 viewer: S. ENDERSEN Review Date: 03-NOV-93 File ID: 026280 Run: R201075
 Prep: FAA OR ICP ACID DIGESTION (LEACHATE) SW846-3010A
 Prep: TOX CHAR LEACHING PROCEDURE (TCLP W/ ORGANICS) SW846-1311

QC Type	Identifier	Source	Parameter	True/Sampl	Spike Val	Observed	Units	% Rec	RPD
ICV01	0816009		NICKEL	.4		.417	mg/L	104.3	
DUP02	0809850	A293883	NICKEL	.584		.579	mg/L		.9
CCV	0816010		NICKEL	5		4.97	mg/L	99.4	
BLA01	0816028		NICKEL			< .004	mg/L		
LCS	0809846		NICKEL	5		4.53	mg/L	90.6	
BLA02	0809847		NICKEL			< .004	mg/L		
SAMPLE	A293882		See Certificate of Analysis						
CCV	0816029		NICKEL	5		5	mg/L	100	
BLA01	0816030		NICKEL			.0041	mg/L		

SELENIUM ICP (1 POINT MSA) SW846-6010A

Analyst : A. HILSCHER Analysis Date: 28-OCT-93 Instrument: ICP Test: M628.7.0
 Reviewer: S. ENDERSEN Review Date: 03-NOV-93 File ID: 026280 Run: R201075
 Prep: FAA OR ICP ACID DIGESTION (LEACHATE) SW846-3010A
 Prep: TOX CHAR LEACHING PROCEDURE (TCLP W/ ORGANICS) SW846-1311

QC Type	Identifier	Source	Parameter	True/Sampl	Spike Val	Observed	Units	% Rec	RPD
ICV01	0815978		SELENIUM	.4		.466	mg/L	116.5	
DUP02	0809850	A293883	SELENIUM	0		BDL	mg/L		0
CCV	0815981		SELENIUM	5		5.15	mg/L	103	
BLA01	0815982		SELENIUM			.0725	mg/L		
LCS	0809846		SELENIUM	20		18.9	mg/L	94.5	
LE	0809847		SELENIUM			.0726	mg/L		
LE	A293882		See Certificate of Analysis						
LE	0815983		SELENIUM	5		5.34	mg/L	106.8	
BLA01	0815984		SELENIUM			.0725	mg/L		

SILVER ICP (1 POINT MSA) SW846-6010A

Analyst : A. HILSCHER Analysis Date: 28-OCT-93 Instrument: ICP Test: M630.7.0
 Reviewer: S. ENDERSEN Review Date: 03-NOV-93 File ID: 026280 Run: R201075
 Prep: FAA OR ICP ACID DIGESTION (LEACHATE) SW846-3010A
 Prep: TOX CHAR LEACHING PROCEDURE (TCLP W/ ORGANICS) SW846-1311

QC Type	Identifier	Source	Parameter	True/Sampl	Spike Val	Observed	Units	% Rec	RPD
ICV01	0815916		SILVER	2		1.91	mg/L	95.5	
DUP02	0809850	A293883	SILVER	.0141		.0116	mg/L		19.5
CCV	0815919		SILVER	1		.993	mg/L	99.3	
BLA01	0815920		SILVER			< .004	mg/L		
LCS	0809846		SILVER	.5		.444	mg/L	88.8	
BLA02	0809847		SILVER			< .004	mg/L		
SAMPLE	A293882		See Certificate of Analysis						
CCV	0815921		SILVER	1		1	mg/L	100	
BLA01	0815922		SILVER			< .004	mg/L		

ZINC ICP (1 POINT MSA) SW846-6010A

Analyst : A. STOCKBURGER Analysis Date: 05-NOV-93 Instrument: ICP Test: M639.7.0
 Reviewer: D. CZERNY Review Date: 05-NOV-93 File ID: 026280 Run: R201329
 Prep: FAA OR ICP ACID DIGESTION (LEACHATE) SW846-3010A
 Prep: TOX CHAR LEACHING PROCEDURE (TCLP W/ ORGANICS) SW846-1311

QC Type	Identifier	Source	Parameter	True/Sampl	Spike Val	Observed	Units	% Rec	RPD
ICV01	0817894		ZINC	.4		.421	mg/L	105.3	
DUP02	0809850	A293883	ZINC	138		137	mg/L		.7
CCV	0817895		ZINC	5		5.05	mg/L	101	
BLA01	0817896		ZINC				mg/L		

QC Type	Identifier	Source	Parameter	True/Sampl	Spike Val	Observed	Units	X Rec	RPD
LCS	Q809846		ZINC	5		4.47	mg/L	89.4	
2	Q809847		ZINC			< .008	mg/L		
SAMPLE	A293882		See Certificate of Analysis						
CCV	Q817899		ZINC	5		5.01	mg/L	100.2	
BLA01	Q817900		ZINC			.03	mg/L		

MERCURY CVAA (1 POINT MSA) SW846-7470

Analyst : G. MAPP Analysis Date: 27-OCT-93 Instrument: CVAA Test: M620.6.0
 Reviewer: S. O'NEAL Review Date: 28-OCT-93 File ID: 026996 Run: R200680
 Prep: MERCURY CVAA ACID DIGESTION (LEACHATE) SW846-7470
 Prep: TOX CHAR LEACHING PROCEDURE (TCLP W/ ORGANICS) SW846-1311

QC Type	Identifier	Source	Parameter	True/Sampl	Spike Val	Observed	Units	X Rec	RPD
ICV01	Q812803		MERCURY	.002		.0019	mg/L	95	
DUP02	Q807864	A293883	MERCURY	.005		< .005	mg/L		0
CCV	Q812820		MERCURY	.003		.0034	mg/L	113.3	
BLA01	Q812821		MERCURY			< .0002	mg/L		
LCS	Q807860		MERCURY	.003		.00292	mg/L	97.3	
BLA02	Q807861		MERCURY			< .0002	mg/L		
SAMPLE	A293882		See Certificate of Analysis						
CCV	Q812822		MERCURY	.003		.00337	mg/L	112.3	
BLA01	Q812823		MERCURY			< .0002	mg/L		

TCLP SEMIVOLATILE ORGANICS (TOXICITY CHARACTERISTIC) SW846-8270A

Analyst : G. BARRETT Analysis Date: 27-OCT-93 Instrument: GC/MS SVGA Test: 0514.3.0
 Reviewer: A. BRADBURN Review Date: 28-OCT-93 File ID: >4873F Run: R200662
 Prep: GC/MS SEPARATORY FUNNEL LIQUID-LIQUID EXTRACTION SW846-3510A
 Prep: TOX CHAR LEACHING PROCEDURE (TCLP W/ ORGANICS) SW846-1311

QC Type	Identifier	Source	Parameter	True/Sampl	Spike Val	Observed	Units	X Rec	RPD
T02	Q807744	L101328	1,4-DICHLOROBENZENE (P-DICHLOROBENZENE)	0	500	320	ug/L	64	
SPI02	Q807744	L101328	2,4-DINITROTOLUENE	0	500	380	ug/L	76	
SPI02	Q807744	L101328	HEXACHLOROBENZENE	0	500	420	ug/L	84	
SPI02	Q807744	L101328	HEXACHLOROCYCLOHEPTADIENE	0	500	370	ug/L	74	
SPI02	Q807744	L101328	HEXACHLOROETHANE	0	500	330	ug/L	66	
SPI02	Q807744	L101328	NITROBENZENE	0	500	380	ug/L	76	
SPI02	Q807744	L101328	PYRIDINE	0	500	260	ug/L	52	
SPI02	Q807744	L101328	2-METHYLPHENOL (O-CRESOL)	0	500	340	ug/L	68	
SPI02	Q807744	L101328	4-METHYLPHENOL (P-CRESOL)	0	500	280	ug/L	56	
SPI02	Q807744	L101328	PENTACHLOROPHENOL	0	500	400	ug/L	80	
SPI02	Q807744	L101328	2,4,5-TRICHLOROPHENOL	0	500	420	ug/L	84	
SPI02	Q807744	L101328	2,4,6-TRICHLOROPHENOL	0	500	400	ug/L	80	
CCV	Q812610		See Attached Report g4862f.ind						
BLA02	Q812612		See Attached Report g4872f.ind						
SAMPLE	A293882		See Certificate of Analysis						

Comments

Q807744 Note: MSD not performed.
 Q807744 NOTE: LCS NOT REQUIRED BECAUSE MS/MSD PASSED METHOD CRITERIA.

TCLP VOLATILE ORGANICS (TOXICITY CHARACTERISTIC) SW846-8240A

Analyst : R. SHAMP Analysis Date: 27-OCT-93 Instrument: GC/MS VOA Test: 0513.3.0
 Reviewer: A. BRADBURN Review Date: 28-OCT-93 File ID: >2866D Run: R200634
 Prep: ZERO HEADSPACE EXTRACTION (TCLP) SW846-1311

QC Type	Identifier	Source	Parameter	True/Sampl	Spike Val	Observed	Units	X Rec	RPD
1	Q813219	A293982	BENZENE	0	50	49	ug/L	98	
.1	Q813219	A293982	CARBON TETRACHLORIDE	0	50	49	ug/L	98	
SPI01	Q813219	A293982	CHLOROBENZENE	0	50	49	ug/L	98	
SPI01	Q813219	A293982	CHLOROFORM	0	50	53	ug/L	106	
SPI01	Q813219	A293982	1,2-DICHLOROETHANE	0	50	56	ug/L	112	

PROJECT RECORD

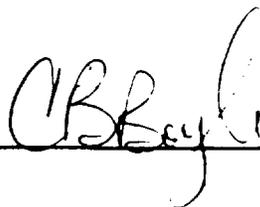
QC Type	Identifier	Source	Parameter	True/Sampl	Spike Val	Observed	Units	% Rec	RPD
SPI01	0813219	A293982	METHYL ETHYL KETONE	0	50	61	ug/L	122	
71	0813219	A293982	VINYL CHLORIDE	0	50	47	ug/L	94	
01	0813220	A293982	BENZENE	0	50	52	ug/L	104	5.9
JPS01	0813220	A293982	CARBON TETRACHLORIDE	0	50	48	ug/L	96	2.1
DPS01	0813220	A293982	CHLOROBENZENE	0	50	52	ug/L	104	5.9
DPS01	0813220	A293982	CHLOROFORM	0	50	53	ug/L	106	0
DPS01	0813220	A293982	1,2-DICHLOROETHANE	0	50	58	ug/L	116	3.5
DPS01	0813220	A293982	METHYL ETHYL KETONE	0	50	65	ug/L	130	6.3
DPS01	0813220	A293982	VINYL CHLORIDE	0	50	47	ug/L	94	0
CCV	0812448		See Attached Report g2860d.ind						
BLA01	0812449		See Attached Report g2861d.ind						
SAMPLE	A293882		See Certificate of Analysis						

Notes

< Less Than Lower Detection Limit
 BDL Below Detection Limit

PROJECT RECORD

Quality Assurance Officer: _____



QUALITY ASSURANCE REPORT

Service Location HERITAGE LABORATORIES, INC. 7901 W. MORRIS ST. INDIANAPOLIS, IN 46231 (317)243-8305	Received	Lab ID
	21-OCT-93	A293883
	Complete	PO Number
	11-NOV-93	92005 *
	Printed	Sampled
	16-NOV-93	20-OCT-93 08:45

Sample Description

SAMPLE DESCRIPTION: ECC-04A1-PBM-08
 LOCATION: ENVIROCHEM

TOTAL SOLIDS EPA 160.3										
Analyst : B. PRIDEMORE			Analysis Date: 25-OCT-93			Test: G401.7.0				
Reviewer: P. ANDERSON			Review Date: 27-OCT-93			File ID: 3538-3540		Run: R200545		
QC Type	Identifier	Source	Parameter	True/Sampl	Spike Val	Observed	Units	% Rec	RPD	
DUP01	Q811640	A293882	SOLIDS	97		97	Percent		0	
LCS01	Q811639		SOLIDS	9.6045		9.604	Percent	100		
SAMPLE	A293883		See Certificate of Analysis							
LCS01	Q811643		SOLIDS	12.6553		12.6552	Percent	100		

PH (S/S/S) SW846-9045A										
Analyst : C. LAOD			Analysis Date: 22-OCT-93			Test: G624.0.0				
Reviewer: S. CARDWELL			Review Date: 25-OCT-93			File ID:		Run: R200221		
QC Type	Identifier	Source	Parameter	True/Sampl	Spike Val	Observed	Units	% Rec	RPD	
ICV01	Q809522		PH	4		4.04	Std. Units	101		
ICV01	Q809524	A293982	PH	7.6		7.6	Std. Units		0	
ICV01	Q809523		PH	7		7.04	Std. Units	100.6		
SAMPLE	A293883		See Certificate of Analysis							
CCV	Q809525		PH	7		7.04	Std. Units	100.6		

CYANIDE, TOTAL (AUTOMATED) SW846-9012										
Analyst : B. PENCE			Analysis Date: 25-OCT-93			Instrument: AUTO-ANALYZER		Test: G101.4.0		
Reviewer: B. SHRAKE			Review Date: 26-OCT-93			File ID: 1056		Run: R200398		
Prep: CYANIDE DISTILLATION SW846-9010A										
QC Type	Identifier	Source	Parameter	True/Sampl	Spike Val	Observed	Units	% Rec	RPD	
ICV01	Q810722		CYANIDE	.212		.208	mg/L	98.1		
ICV01	Q810724		CYANIDE	.212		.207	mg/L	97.6		
ICV01	Q810746		CYANIDE	.212		.202	mg/L	95.3		
SPI02	Q810737	A293818	CYANIDE	0	2.5	.577	mg/kg	23.1		
DPS02	Q810739	A293728	CYANIDE	0	.1	.087	mg/L	87	3.4	
DUP02	Q810736	A293882	CYANIDE	.25		< .25	mg/kg		0	
CDL01	Q810721		CYANIDE	.01		.011	mg/L	110		
CCV	Q810734		CYANIDE	.1		.101	mg/L	101		
BLA01	Q810735		CYANIDE			.003	mg/L			
BLA02	Q810726		CYANIDE			.003	mg/L			
LCS	Q810727		CYANIDE	.3		.259	mg/L	86.3		
SAMPLE	A293883		See Certificate of Analysis							
CCV	Q810740		CYANIDE	.1		.111	mg/L	111		
BLA01	Q810741		CYANIDE			.003	mg/L			
BLA02	Q810728		CYANIDE			.003	mg/L			
LCS	Q810731		CYANIDE	.3		.284	mg/L	94.7		

Comments

Q810737 SAMPLE EXHIBITS LOW SPIKE RECOVERY. THE SAMPLE AND SPIKE WERE
 Q810737 DUPLICATED AND THE SAME LOW RECOVERY WAS OBTAINED.

SULFIDE SW846-9030A									
Analyst : L. WILSON		Analysis Date: 04-NOV-93			Test: G110.4.1				
viewer: B. SHRAKE		Review Date: 05-NOV-93			File ID: 1531-1533		Run: R201341		
Prep: TOTAL AVAILABLE SULFIDE EXTRACTION SW 7.3.4.1									
QC Type	Identifier	Source	Parameter	True/Sampl	Spike Val	Observed	Units	X Rec	RPD
SP101	0818051	A295696	SULFIDE	0	34.4	32.4	mg/L	94.2	
DUP01	0818050	A295695	SULFIDE	0		BDL	mg/L		
DUP02	0818052	H119257	SULFIDE	0		BDL	mg/kg		
BLA01	0818048		SULFIDE			.0389	mg/L		
LCS01	0818049		SULFIDE	68.8		68.5	mg/L	99.6	
SAMPLE	A293883		See Certificate of Analysis						
LCS	0818053		SULFIDE	68.8		58.8	mg/L	85.5	

ARSENIC ICP (1 POINT MSA) SW846-6010A									
Analyst : A. NILSCHER		Analysis Date: 28-OCT-93			Instrument: ICP		Test: M603.7.0		
Reviewer: S. ENDERSEN		Review Date: 03-NOV-93			File ID: 026280		Run: R201075		
Prep: FAA OR ICP ACID DIGESTION (LEACHATE) SW846-3010A									
Prep: TOX CHAR LEACHING PROCEDURE (TCLP W/ ORGANICS) SW846-1311									
QC Type	Identifier	Source	Parameter	True/Sampl	Spike Val	Observed	Units	X Rec	RPD
ICV01	0815970		ARSENIC	.4		.429	mg/L	107.3	
DUP02	0809850	A293883	ARSENIC	0		BDL	mg/L		0
CCV	0815971		ARSENIC	5		5.2	mg/L	104	
BLA01	0815972		ARSENIC			< .04	mg/L		
LCS	0809846		ARSENIC	20		18.9	mg/L	94.5	
BLA02	0809847		ARSENIC			< .04	mg/L		
SAMPLE	A293883		See Certificate of Analysis						
CCV	0815974		ARSENIC	5		5.14	mg/L	102.8	
11	0815975		ARSENIC			< .04	mg/L		

BARIUM ICP (1 POINT MSA) SW846-6010A									
Analyst : A. NILSCHER		Analysis Date: 28-OCT-93			Instrument: ICP		Test: M604.7.0		
Reviewer: S. ENDERSEN		Review Date: 03-NOV-93			File ID: 026280		Run: R201075		
Prep: FAA OR ICP ACID DIGESTION (LEACHATE) SW846-3010A									
Prep: TOX CHAR LEACHING PROCEDURE (TCLP W/ ORGANICS) SW846-1311									
QC Type	Identifier	Source	Parameter	True/Sampl	Spike Val	Observed	Units	X Rec	RPD
ICV01	0815923		BARIUM	2		2.03	mg/L	101.5	
DUP02	0809850	A293883	BARIUM	1.87		1.86	mg/L		.5
CCV	0815924		BARIUM	5		5.03	mg/L	100.6	
BLA01	0815925		BARIUM			< .004	mg/L		
LCS	0809846		BARIUM	20		18.8	mg/L	94	
BLA02	0809847		BARIUM			< .004	mg/L		
SAMPLE	A293883		See Certificate of Analysis						
CCV	0815941		BARIUM	5		4.91	mg/L	98.2	
BLA01	0815942		BARIUM			< .004	mg/L		

CADMIUM ICP (1 POINT MSA) SW846-6010A									
Analyst : A. NILSCHER		Analysis Date: 28-OCT-93			Instrument: ICP		Test: M608.7.0		
Reviewer: S. ENDERSEN		Review Date: 03-NOV-93			File ID: 026280		Run: R201075		
Prep: FAA OR ICP ACID DIGESTION (LEACHATE) SW846-3010A									
Prep: TOX CHAR LEACHING PROCEDURE (TCLP W/ ORGANICS) SW846-1311									
QC Type	Identifier	Source	Parameter	True/Sampl	Spike Val	Observed	Units	X Rec	RPD
ICV01	0815945		CADMIUM	.4		.422	mg/L	105.5	
DUP02	0809850	A293883	CADMIUM	.476		.475	mg/L		.2
	0815946		CADMIUM	5		4.96	mg/L	99.2	
	0815947		CADMIUM			< .002	mg/L		
LCS	0809846		CADMIUM	.5		.456	mg/L	91.2	
BLA02	0809847		CADMIUM			< .002	mg/L		
SAMPLE	A293883		See Certificate of Analysis						

QC Type	Identifier	Source	Parameter	True/Sampl	Spike Val	Observed	Units	% Rec	RPD
	0815948		CADMIUM	5		4.92	mg/L	98.4	
1	0815949		CADMIUM			< .002	mg/L		

CHROMIUM ICP (1 POINT MSA) SW846-6010A

Analyst : A. HILSCHER Analysis Date: 28-OCT-93 Instrument: ICP Test: M610.7.0
 Reviewer: S. ENDERSEN Review Date: 03-NOV-93 File ID: 026280 Run: R201075
 Prep: FAA OR ICP ACID DIGESTION (LEACHATE) SW846-3010A
 Prep: TOX CHAR LEACHING PROCEDURE (TCLP W/ ORGANICS) SW846-1311

QC Type	Identifier	Source	Parameter	True/Sampl	Spike Val	Observed	Units	% Rec	RPD
ICV01	0815952		CHROMIUM	.4		.408	mg/L	102	
DUP02	0809850	A293883	CHROMIUM	.0106		.0088	mg/L		18.6
CCV	0815953		CHROMIUM	5		5.04	mg/L	100.8	
BLA01	0815954		CHROMIUM			< .004	mg/L		
LCS	0809846		CHROMIUM	2		1.86	mg/L	93	
BLA02	0809847		CHROMIUM			< .004	mg/L		
SAMPLE	A293883		See Certificate of Analysis						
CCV	0815955		CHROMIUM	5		4.99	mg/L	99.8	
BLA01	0815956		CHROMIUM			.0044	mg/L		

COPPER ICP (1 POINT MSA) SW846-6010A

Analyst : A. HILSCHER Analysis Date: 28-OCT-93 Instrument: ICP Test: M612.7.0
 Reviewer: S. ENDERSEN Review Date: 03-NOV-93 File ID: 026280 Run: R201075
 Prep: FAA OR ICP ACID DIGESTION (LEACHATE) SW846-3010A
 Prep: TOX CHAR LEACHING PROCEDURE (TCLP W/ ORGANICS) SW846-1311

QC Type	Identifier	Source	Parameter	True/Sampl	Spike Val	Observed	Units	% Rec	RPD
ICV01	0815986		COPPER	.4		.408	mg/L	102	
Y2	0809850	A293883	COPPER	1.77		1.74	mg/L		1.7
	0815987		COPPER	5		5.05	mg/L	101	
BLA01	0815988		COPPER			< .008	mg/L		
LCS	0809846		COPPER	2.5		2.29	mg/L	91.6	
BLA02	0809847		COPPER			< .008	mg/L		
SAMPLE	A293883		See Certificate of Analysis						
CCV	0816005		COPPER	5		4.96	mg/L	99.2	
BLA01	0816006		COPPER			.0124	mg/L		

LEAD ICP (1 POINT MSA) SW846-6010A

Analyst : A. HILSCHER Analysis Date: 28-OCT-93 Instrument: ICP Test: M616.7.0
 Reviewer: S. ENDERSEN Review Date: 03-NOV-93 File ID: 026280 Run: R201075
 Prep: FAA OR ICP ACID DIGESTION (LEACHATE) SW846-3010A
 Prep: TOX CHAR LEACHING PROCEDURE (TCLP W/ ORGANICS) SW846-1311

QC Type	Identifier	Source	Parameter	True/Sampl	Spike Val	Observed	Units	% Rec	RPD
ICV01	0815963		LEAD	.4		.402	mg/L	100.5	
DUP02	0809850	A293883	LEAD	12.9		12.8	mg/L		.8
CCV	0815964		LEAD	5		5.02	mg/L	100.4	
BLA01	0815965		LEAD			< .02	mg/L		
LCS	0809846		LEAD	5		4.54	mg/L	90.8	
BLA02	0809847		LEAD			< .02	mg/L		
SAMPLE	A293883		See Certificate of Analysis						
CCV	0815966		LEAD	5		4.99	mg/L	99.8	
BLA01	0815967		LEAD			< .02	mg/L		

NICKEL ICP (1 POINT MSA) SW846-6010A

Analyst : A. NILSCHER

Analysis Date: 28-OCT-93 Instrument: ICP

Test: M622.7.0

viewer: S. ENDERSEN

Review Date: 03-NOV-93 File ID: 026280

Run: R201075

Prep: FAA OR ICP ACID DIGESTION (LEACHATE) SW846-3010A

Prep: TOX CHAR LEACHING PROCEDURE (TCLP W/ ORGANICS) SW846-1311

QC Type	Identifier	Source	Parameter	True/Sampl	Spike Val	Observed	Units	% Rec	RPD
ICV01	Q816009		NICKEL	.4		.417	mg/L	104.3	
DUP02	Q809850	A293883	NICKEL	.584		.579	mg/L		.9
CCV	Q816010		NICKEL	5		4.97	mg/L	99.4	
BLA01	Q816011		NICKEL			< .004	mg/L		
LCS	Q809846		NICKEL	5		4.53	mg/L	90.6	
BLA02	Q809847		NICKEL			< .004	mg/L		
SAMPLE	A293883		See Certificate of Analysis						
BLA01	Q816028		NICKEL			< .004	mg/L		
CCV	Q816029		NICKEL	5		5	mg/L	100	

SELENIUM ICP (1 POINT MSA) SW846-6010A

Analyst : A. NILSCHER

Analysis Date: 28-OCT-93 Instrument: ICP

Test: M628.7.0

Reviewer: S. ENDERSEN

Review Date: 03-NOV-93 File ID: 026280

Run: R201075

Prep: FAA OR ICP ACID DIGESTION (LEACHATE) SW846-3010A

Prep: TOX CHAR LEACHING PROCEDURE (TCLP W/ ORGANICS) SW846-1311

QC Type	Identifier	Source	Parameter	True/Sampl	Spike Val	Observed	Units	% Rec	RPD
ICV01	Q815978		SELENIUM	.4		.466	mg/L	116.5	
DUP02	Q809850	A293883	SELENIUM	0		BDL	mg/L		0
CCV	Q815979		SELENIUM	5		5.39	mg/L	107.8	
BLA01	Q815980		SELENIUM			.0725	mg/L		
LCS	Q809846		SELENIUM	20		18.9	mg/L	94.5	
BLA02	Q809847		SELENIUM			.0726	mg/L		
SAMPLE	A293883		See Certificate of Analysis						
CCV	Q815981		SELENIUM	5		5.15	mg/L	103	
BLA01	Q815982		SELENIUM			.0725	mg/L		

SILVER ICP (1 POINT MSA) SW846-6010A

Analyst : A. NILSCHER

Analysis Date: 28-OCT-93 Instrument: ICP

Test: M630.7.0

Reviewer: S. ENDERSEN

Review Date: 03-NOV-93 File ID: 026280

Run: R201075

Prep: FAA OR ICP ACID DIGESTION (LEACHATE) SW846-3010A

Prep: TOX CHAR LEACHING PROCEDURE (TCLP W/ ORGANICS) SW846-1311

QC Type	Identifier	Source	Parameter	True/Sampl	Spike Val	Observed	Units	% Rec	RPD
ICV01	Q815916		SILVER	2		1.91	mg/L	95.5	
DUP02	Q809850	A293883	SILVER	.0141		.0116	mg/L		19.5
CCV	Q815917		SILVER	1		1.01	mg/L	101	
BLA01	Q815918		SILVER			< .004	mg/L		
LCS	Q809846		SILVER	.5		.444	mg/L	88.8	
BLA02	Q809847		SILVER			< .004	mg/L		
SAMPLE	A293883		See Certificate of Analysis						
CCV	Q815919		SILVER	1		.993	mg/L	99.3	
BLA01	Q815920		SILVER			< .004	mg/L		

ZINC ICP (1 POINT MSA) SW846-6010A

Analyst : A. STOCKBURGER

Analysis Date: 05-NOV-93 Instrument: ICP

Test: M639.7.0

Reviewer: D. CZERNY

Review Date: 05-NOV-93 File ID: 026280

Run: R201329

Prep: FAA OR ICP ACID DIGESTION (LEACHATE) SW846-3010A

Prep: TOX CHAR LEACHING PROCEDURE (TCLP W/ ORGANICS) SW846-1311

Type	Identifier	Source	Parameter	True/Sampl	Spike Val	Observed	Units	% Rec	RPD
ICV01	Q817894		ZINC	.4		.421	mg/L	105.3	
DUP02	Q809850	A293883	ZINC	138		137	mg/L		.7
CCV	Q817895		ZINC	5		5.05	mg/L	101	
BLA01	Q817896		ZINC			.015	mg/L		

PROJECT RECORD

QC Type	Identifier	Source	Parameter	True/Sampl	Spike Val	Observed	Units	% Rec	RPD
MS	Q809846		ZINC	5		4.47	mg/L	89.4	
J2	Q809847		ZINC			< .008	mg/L		
SAMPLE	A293883		See Certificate of Analysis						
CCV	Q817899		ZINC	5		5.01	mg/L	100.2	
BLA01	Q817900		ZINC			.03	mg/L		

MERCURY CVAA (1 POINT MSA) SW846-7470

Analyst : G. MAPP Analysis Date: 27-OCT-93 Instrument: CVAA Test: M620.6.0
 Reviewer: S. O'NEAL Review Date: 28-OCT-93 File ID: 026996 Run: R200680
 Prep: MERCURY CVAA ACID DIGESTION (LEACHATE) SW846-7470
 Prep: TOX CHAR LEACHING PROCEDURE (TCLP W/ ORGANICS) SW846-1311

QC Type	Identifier	Source	Parameter	True/Sampl	Spike Val	Observed	Units	% Rec	RPD
ICV01	Q812803		MERCURY	.002		.0019	mg/L	95	
DUP02	Q807864	A293883	MERCURY	.005		< .005	mg/L		0
CCV	Q812820		MERCURY	.003		.0034	mg/L	113.3	
BLA01	Q812821		MERCURY			< .0002	mg/L		
LCS	Q807860		MERCURY	.003		.00292	mg/L	97.3	
BLA02	Q807861		MERCURY			< .0002	mg/L		
SAMPLE	A293883		See Certificate of Analysis						
CCV	Q812822		MERCURY	.003		.00337	mg/L	112.3	
BLA01	Q812823		MERCURY			< .0002	mg/L		

TCLP SEMIVOLATILE ORGANICS (TOXICITY CHARACTERISTIC) SW846-8270A

Analyst : G. BARRETT Analysis Date: 27-OCT-93 Instrument: GC/MS SV0A Test: 0514.3.0
 Reviewer: A. BRADBURN Review Date: 28-OCT-93 File ID: >4874F Run: R200662
 Prep: GC/MS SEPARATORY FUNNEL LIQUID-LIQUID EXTRACTION SW846-3510A
 Prep: TOX CHAR LEACHING PROCEDURE (TCLP W/ ORGANICS) SW846-1311

Type	Identifier	Source	Parameter	True/Sampl	Spike Val	Observed	Units	% Rec	RPD
SP102	Q807744	L101328	1,4-DICHLOROBENZENE (P-DICHLOROBENZE	0	500	320	ug/L	64	
SP102	Q807744	L101328	2,4-DINITROTOLUENE	0	500	380	ug/L	76	
SP102	Q807744	L101328	HEXACHLOROBENZENE	0	500	420	ug/L	84	
SP102	Q807744	L101328	HEXACHLOROBUTADIENE	0	500	370	ug/L	74	
SP102	Q807744	L101328	HEXACHLOROETHANE	0	500	330	ug/L	66	
SP102	Q807744	L101328	NITROBENZENE	0	500	380	ug/L	76	
SP102	Q807744	L101328	PYRIDINE	0	500	260	ug/L	52	
SP102	Q807744	L101328	2-METHYLPHENOL (O-CRESOL)	0	500	340	ug/L	68	
SP102	Q807744	L101328	4-METHYLPHENOL (P-CRESOL)	0	500	280	ug/L	56	
SP102	Q807744	L101328	PENTACHLOROPHENOL	0	500	400	ug/L	80	
SP102	Q807744	L101328	2,4,5-TRICHLOROPHENOL	0	500	420	ug/L	84	
SP102	Q807744	L101328	2,4,6-TRICHLOROPHENOL	0	500	400	ug/L	80	
CCV	Q812610		See Attached Report g4862f.ind						
BLA02	Q812612		See Attached Report g4872f.ind						
SAMPLE	A293883		See Certificate of Analysis						

Comments

Q807744 Note: MSD not performed.
 Q807744 NOTE: LCS NOT REQUIRED BECAUSE MS/MSD PASSED METHOD CRITERIA.

TCLP VOLATILE ORGANICS (TOXICITY CHARACTERISTIC) SW846-8240A

Analyst : R. SHAMP Analysis Date: 27-OCT-93 Instrument: GC/MS VOA Test: 0513.3.0
 Reviewer: A. BRADBURN Review Date: 28-OCT-93 File ID: >2867D Run: R200634
 Prep: ZERO HEADSPACE EXTRACTION (TCLP) SW846-1311

QC Type	Identifier	Source	Parameter	True/Sampl	Spike Val	Observed	Units	% Rec	RPD
J1	Q813219	A293982	BENZENE	0	50	49	ug/L	98	
J101	Q813219	A293982	CARBON TETRACHLORIDE	0	50	49	ug/L	98	
SP101	Q813219	A293982	CHLOROBENZENE	0	50	49	ug/L	98	
SP101	Q813219	A293982	CHLOROFORM	0	50	53	ug/L	106	
SP101	Q813219	A293982	1,2-DICHLOROETHANE	0	50	56	ug/L	112	

PROJECT RECORD

QC Type	Identifier	Source	Parameter	True/Sampl	Spike Val	Observed	Units	% Rec	RPD
01	Q813219	A293982	METHYL ETHYL KETONE	0	50	61	ug/L	122	
J1	Q813219	A293982	VINYL CHLORIDE	0	50	47	ug/L	94	
S01	Q813220	A293982	BENZENE	0	50	52	ug/L	104	5.9
DPS01	Q813220	A293982	CARBON TETRACHLORIDE	0	50	48	ug/L	96	2.1
DPS01	Q813220	A293982	CHLOROBENZENE	0	50	52	ug/L	104	5.9
DPS01	Q813220	A293982	CHLOROFORM	0	50	53	ug/L	106	0
DPS01	Q813220	A293982	1,2-DICHLOROETHANE	0	50	58	ug/L	116	3.5
DPS01	Q813220	A293982	METHYL ETHYL KETONE	0	50	65	ug/L	130	6.3
DPS01	Q813220	A293982	VINYL CHLORIDE	0	50	47	ug/L	94	0
CCV	Q812448		See Attached Report g2860d.ind						
BLA01	Q812449		See Attached Report g2861d.ind						
SAMPLE	A293883		See Certificate of Analysis						

Notes

< Less Than Lower Detection Limit
 BDL Below Detection Limit

PROJECT RECORD

Quality Assurance Officer: _____

C. Boyle

Heritage Laboratory, Indianapolis
Semi-volatile Continuing Calibration Report

Operator ID: _____ Date Acquired: 27 Oct 93 10:07 am
 File: C:\F102793\4862F.D 5970 - MS Misc. 50 ug/mL
 Method: CALPEST.M Title: CLP BNA Calibration
 Last Calibration Update: Wed Oct 27 11:09:20 1993

C = CCC Max Dev = 30% P = SPCC Min RF = 0.05
 S = Surrogate I = ISTD M = Matrix Spike Compound

cal20 = 4704F.D cal150 = 4705F.D cal180 = 4706F.D
 cal120 = 4707F.D cal160 = 4708F.D

PK#	Compound	AvgRRF	CCRRF	%Dev
1 I	1,4-Dichlorobenzene-d4	1.00000	1.00000	0.0
2	N-nitroso-dimethylamine	0.75700	0.65240	13.8
3	Pyridine	1.06719	0.93900	12.0
4	2-Picoline	1.19457	1.08163	9.5
5 S	2-Fluorophenol	1.08462	1.06732	1.6
6	Aniline	1.56467	1.58961	1.6
7 S	Phenol-d5	1.27351	1.22553	3.8
8 MC	Phenol	1.42717	1.50482	5.4
9	bis(2-Chloroethyl)ether	1.22093	1.20057	1.7
10 S	2-Chlorophenol-d4	1.11249	1.17265	5.4
11 MC	2-Chlorophenol	1.25915	1.31515	4.4
12	1,3-Dichlorobenzene	1.36008	1.47271	8.3
13 MC	1,4-Dichlorobenzene	1.39413	1.51271	8.5
14 S	1,2-Dichlorobenzene-d4	1.38122	1.49709	8.4
15	1,2-Dichlorobenzene	1.30713	1.38737	6.1
16	Benzyl alcohol	0.66785	0.68644	2.8
17	2-Methylphenol	0.91351	0.95654	4.7
18	bis(2-chloroisopropyl)ether	1.64097	2.07920	26.7
19 MP	n-Nitroso-di-n-propylamine	0.83178	0.90979	9.4
20	4-Methylphenol	0.90586	0.99956	10.3
21	Hexachloroethane	0.58928	0.62210	5.6
22 I	Naphthalene-d8	1.00000	1.00000	0.0
23 S	Nitrobenzene-d5	0.38418	0.37985	1.1
24	Nitrobenzene	0.39886	0.40426	1.4
25	Isophorone	0.73974	0.71572	3.2
26 C	2-Nitrophenol	0.22969	0.23913	4.1
27	2,4-Dimethylphenol	0.36662	0.37270	1.7
28	bis(2-Chloroethoxy)methane	0.44794	0.47164	5.3
29 C	2,4-Dichlorophenol	0.33378	0.35733	7.1
30	Benzoic acid	0.24480	0.20346	16.9
31 M	1,2,4-Trichlorobenzene	0.32643	0.36892	13.0
32	Naphthalene	0.98577	1.08264	9.8
33	4-Chloroaniline	0.28344	0.44180	55.9
34	Toluediamine	0.00034	0.00010	69.0
35 C	Hexachlorobutadiene	0.21913	0.22701	3.6
36 MC	4-Chloro-3-methylphenol	0.32207	0.30413	5.6
37	2-Methylnaphthalene	0.63052	0.67066	6.4
38 I	Acenaphthene-d10	1.00000	1.00000	0.0
39 P	Hexachlorocyclopentadiene	0.32342	0.19775	38.9
40	1,2,4,5-Tetrachlorobenzene	0.59466	0.69444	16.8
41 C	2,4,6-Trichlorophenol	0.42489	0.45954	8.2
42	2,4,5-Trichlorophenol	0.45923	0.44993	2.0
43 S	2-Fluorobiphenyl	1.19843	1.30238	8.7

PROJECT RECORD

Heritage Laboratory, Indianapolis
Semi-volatile Continuing Calibration Report

Operator ID: _____ Date Acquired: 27 Oct 93 10:07 am
 File: C:\F102793\4862F.D 5970 - MS Misc. 50 ug/mL
 Method: CALPEST.M Title: CLP BNA Calibration
 Last Calibration Update: Wed Oct 27 11:09:20 1993

C = CCC Max Dev = 30% P = SPCC Min RF = 0.05
 S = Surrogate I = ISTD M = Matrix Spike Compound

cal20 = 4704F.D cal50 = 4705F.D cal80 = 4706F.D
 call20 = 4707F.D call60 = 4708F.D

PK#	Compound	AvgRRF	CCRRF	%Dev
44	2-Chloronaphthalene	1.14226	1.33348	16.7
45	2-Nitroaniline	0.37723	0.42898	13.7
46	Dimethylphthalate	1.35335	1.43892	6.3
47	1,3-Dinitrobenzene	0.22726	0.22985	1.1
48	2,6-Dinitrotoluene	0.35795	0.37766	5.5
49	Acenaphthylene	1.81910	2.24966	23.7
50	3-Nitroaniline	0.36874	0.38168	3.5
51 MC	Acenaphthene	1.10084	1.22710	11.5
52 P	2,4-Dinitrophenol	0.15714	0.16040	2.1
53 MP	4-Nitrophenol	0.19657	0.15244	22.5
54	Dibenzofuran	1.50118	1.66526	10.9
55 M	2,4-Dinitrotoluene	0.44701	0.48319	8.1
56	2,3,4,6-Tetrachlorophenol	0.35274	0.32900	6.7
57	Diethylphthalate	1.42231	1.56086	9.7
58	Fluorene	1.08292	1.21568	12.3
59	4-Chlorophenyl-phenylether	0.58419	0.64586	10.6
60	4-Nitroaniline	0.38347	0.43664	13.9
61 I	Phenanthrene-d10	1.00000	1.00000	0.0
62	4,6-Dinitro-2-methylphenol	0.14242	0.14954	5.0
63 C	n-Nitrosodiphenylamine	0.46548	0.50813	9.2
64 S	2,4,6-Tribromophenol	0.13880	0.10794	22.2
65	alpha-BHC	0.14586	0.14564	0.2
66	4-Bromophenyl-phenylether	0.21673	0.21471	0.9
67	Hexachlorobenzene	0.26111	0.23400	10.4
68	beta-BHC	0.11129	0.10623	4.5
69 MC	Pentachlorophenol	0.16464	0.14259	13.4
70	gamma-BHC	0.12314	0.11921	3.2
71	Phenanthrene	0.94907	1.10646	16.6
72	Anthracene	0.90543	1.11246	22.9
73	delta-BHC	0.10172	0.10710	5.3
74	Carbazole	0.72898	0.87465	20.0
75	Heptachlor	0.10616	0.09968	6.1
76	Di-n-butylphthalate	1.26938	1.49537	17.8
77	Aldrin	0.07318	0.06807	7.0
78	Heptachlor epoxide	0.04134	0.04475	8.3
79 C	Fluoranthene	0.95856	1.15788	20.8
80 I	Chrysene-d12	1.00000	1.00000	0.0
81	Benzidine	0.41779	0.30874	26.1
82 M	Pyrene	1.23815	1.40785	13.7
83	alpha-Endosulfan	0.03728	0.03176	14.8
84	p,p'-DDE	0.24714	0.22869	7.5
85 S	Terphenyl-d14	0.84202	0.90106	7.0
86	Dieldrin	0.19405	0.21438	10.5

PROJECT RECORD

Heritage Laboratory, Indianapolis
Semi-volatile Continuing Calibration Report

Operator ID: _____ Date Acquired: 27 Oct 93 10:07 am
 File: C:\F102793\4862F.D 5970 - MS Misc. 50 ug/mL
 Method: CALPEST.M Title: CLP BNA Calibration
 Last Calibration Update: Wed Oct 27 11:09:20 1993

C = CCC Max Dev = 30% P = SPCC Min RF = 0.05
 S = Surrogate I = ISTD M = Matrix Spike Compound

cal20 = 4704F.D cal150 = 4705F.D cal180 = 4706F.D
 cal120 = 4707F.D cal160 = 4708F.D

PK#	Compound	AvgRRF	CCRRF	%Dev
87	Endrin	0.01210	0.01282	5.9
88	Endrin aldehyde	0.00096	0.00093	3.3
89	beta-Endosulfan	0.04781	0.04742	0.8
90	p,p'-DDD	0.41252	0.43437	5.3
91	Butylbenzylphthalate	0.69996	0.77738	11.1
92	Endosulfan sulfate	0.08342	0.07629	8.5
93	p,p'-DDT	0.30368	0.30526	0.5
94	Benzo[a]anthracene	1.09235	1.14881	5.2
95	3,3'-Dichlorobenzidine	0.25629	0.36761	43.4
96	Chrysene	1.03289	1.14348	10.7
97	bis(2-Ethylhexyl)phthalate	0.89670	1.01753	13.5
98 I	Perylene-d12	1.00000	1.00000	0.0
99 C	Di-n-octylphthalate	1.79208	2.20134	22.8
100	Benzo[b]fluoranthene	1.19326	1.31048	9.8
	Benzo[k]fluoranthene	1.14950	1.27758	11.1
102 C	Benzo[a]pyrene	1.09904	1.20437	9.6
103	Indeno[1,2,3-cd]pyrene	1.04422	1.10028	5.4
104	Dibenz[a,h]anthracene	0.84199	0.91507	8.7
105	Benzo[g,h,i]perylene	0.86203	0.90638	5.1

(#) = Out of Range (Advisory for non-CCC)

PROJECT RECORD

HERITAGE LABORATORIES, INC
SEMI-VOLATILES ANALYSIS-WATER METHOD BLANK
ANALYSIS METHOD: SW846-8270

MASS SPEC FILE: >4872F

SVL# 676-749

ANALYSIS DATE/TIME: 10/27/93 18:34

PREP DATE: 10/27/93

TARGET COMPOUND LIST	RESULT	UNITS	DET. LIMIT
Acenaphthene.....	BDL	uG/L	50
Acenaphthylene.....	BDL	uG/L	50
Anthracene.....	BDL	uG/L	50
Benz(a)anthracene.....	BDL	uG/L	50
Benzo(a)pyrene.....	BDL	uG/L	50
Benzo(b)fluoranthene.....	BDL	uG/L	50
Benzo(ghi)perylene.....	BDL	uG/L	50
Benzo(k)fluoranthene.....	BDL	uG/L	50
Benzyl Alcohol.....	BDL	uG/L	50
Benzylbutylphthalate.....	BDL	uG/L	50
Bis(2-chloroethoxy)methane.....	BDL	uG/L	50
Bis(2-chloroethyl)ether.....	BDL	uG/L	50
Bis(2-chloroisopropyl)ether.....	BDL	uG/L	50
Bis(2-ethylhexyl)phthalate.....	BDL	uG/L	50
4-Bromophenylphenylether.....	BDL	uG/L	50
Carbazole.....	BDL	uG/L	50
4-Chloroaniline.....	BDL	uG/L	50
2-Chloronaphthalene.....	BDL	uG/L	50
4-Chlorophenylphenylether.....	BDL	uG/L	50
Chrysene.....	BDL	uG/L	50
Dibenz(a,h)anthracene.....	BDL	uG/L	50
Dibenzofuran.....	BDL	uG/L	50
1,2-Dichlorobenzene.....	BDL	uG/L	50
1,3-Dichlorobenzene.....	BDL	uG/L	50
1,4-Dichlorobenzene.....	BDL	uG/L	50
3,3'-Dichlorobenzidine.....	BDL	uG/L	100
Diethylphthalate.....	BDL	uG/L	50
Dimethylphthalate.....	BDL	uG/L	50
Di-n-butylphthalate.....	BDL	uG/L	50
Dinitrobenzenes.....	BDL	uG/L	250
2,4-Dinitrotoluene.....	BDL	uG/L	50
2,6-Dinitrotoluene.....	BDL	uG/L	50
Di-n-octylphthalate.....	BDL	uG/L	50
Fluoranthene.....	BDL	uG/L	50
Fluorene.....	BDL	uG/L	50
Hexachlorobenzene.....	BDL	uG/L	50
Hexachlorobutadiene.....	BDL	uG/L	50
Hexachlorocyclopentadiene.....	BDL	uG/L	50
Hexachloroethane.....	BDL	uG/L	50
Indeno(1,2,3-cd)pyrene.....	BDL	uG/L	50
Isophorone.....	BDL	uG/L	50
2-Methylnaphthalene.....	BDL	uG/L	50
Naphthalene.....	BDL	uG/L	50

2-Nitroaniline.....	BDL	uG/L	250
3-Nitroaniline.....	BDL	uG/L	250
4-Nitroaniline.....	BDL	uG/L	250
Nitrobenzene.....	BDL	uG/L	50
N-Nitroso-diphenylamine.....	BDL	uG/L	50
N-Nitroso-di-n-propylamine.....	BDL	uG/L	50
Phenanthrene.....	BDL	uG/L	50
2-Picoline.....	BDL	uG/L	250
Pyrene.....	BDL	uG/L	50
Pyridine.....	BDL	uG/L	250
Tetrachlorobenzenes.....	BDL	uG/L	50
Toluenediamine.....	BDL	uG/L	250
1,2,4-Trichlorobenzene.....	BDL	uG/L	50
Benzoic Acid.....	BDL	uG/L	250
4-Chloro-3-methylphenol.....	BDL	uG/L	50
2-Chlorophenol.....	BDL	uG/L	50
2,4-Dichlorophenol.....	BDL	uG/L	50
2,4-Dimethylphenol.....	BDL	uG/L	50
4,6-Dinitro-2-methylphenol.....	BDL	uG/L	250
2,4-Dinitrophenol.....	BDL	uG/L	50
2-Methylphenol.....	BDL	uG/L	50
4-Methylphenol.....	BDL	uG/L	50
2-Nitrophenol.....	BDL	uG/L	50
4-Nitrophenol.....	BDL	uG/L	250
Pentachlorophenol.....	BDL	uG/L	250
Phenol.....	BDL	uG/L	50
Tetrachlorophenol.....	BDL	uG/L	50
2,4,5-Trichlorophenol.....	BDL	uG/L	250
2,4,6-Trichlorophenol.....	BDL	uG/L	50

SURROGATE LIST

2-Fluorophenol.....	64	% Rec	spike conc 100
Phenol-d5.....	53	% Rec	100
Nitrobenzene-d5.....	95	% Rec	50
2-Fluorobiphenyl.....	93	% Rec	50
2,4,6-Tribromophenol.....	92	% Rec	100
Terphenyl-d14.....	92	% Rec	50

ALSO DETECTED

1-Methylethyl Propanoic Acid...	CONC.	R.T.
1-Methylethyl Butanoic Acid....	(9)	5.03
() = ESTIMATED CONCENTRATION	(20)	7.72

EMS-Heritage Laboratories, Indianapolis
Volatile Continuing Calibration Check

Sample ID : >2860D::D2 Inj Time : 931027 06:16 ID File : VOL624::SC

 Analyst : REGI Calibration File : CAL502::D3

 Mass Spec ID : GCMS#4 Last Calibration File Update : 921208 08:28

Calibration
 Data Files: 20 uG/L->9019D 50 uG/L->9020D 100 uG/L->9021D
 150 uG/L->9022D 200 uG/L->9023D

Minimum RF for SPCC is .3 Maximum % Diff for CCC is 25%

Compound	RF	RF	%Diff	CCC	SPCC
Chloromethane	.65576	.47570	27.46		**
Bromomethane	1.05641	1.03293	2.22		
Dichlorodifluoromethane	1.44521	1.27281	11.93		
Vinyl Chloride	.77261	.62985	18.48	*	
Methylene chloride	1.56069	1.34088	14.08		
Chloroethane	.57828	.45716	20.94		
Acrolein	.00131	.00177	35.92		(Conc=600.00)
Acetone	.19067	.25178	32.05		
Carbon disulfide	2.31534	2.21121	4.50		
Acrylonitrile	.11052	.03704	66.49		(Conc=600.00)
Fluorotrichloromethane	3.84158	3.18918	16.98		
1,1-Dichloroethene	2.09974	1.92381	8.38	*	
1,1-Dichloroethane	2.44503	2.00350	18.06		**
Tetrahydrofuran	.14507	.10251	29.34		(Conc=125.00)
1,2-Dichloroethene (total)	4.17010	3.43526	17.62		
Diethyl ether	.65564	.57806	11.83		
Chloroform	3.68867	3.15495	14.47	*	
Trichlorotrifluoroethane	2.64838	2.88313	8.86		
D4 DICHLOROETHANE	2.22835	1.84372	17.26		
1,2-Dichloroethane	.58701	.63497	8.17		
Methyl Ethyl Ketone	.29352	.26218	10.67		
Methyl-tert-butyl ether	.68489	.61241	10.58		
1,1,1-Trichloroethane	.91729	.93553	1.99		
Carbon tetrachloride	1.01668	1.09915	8.11		
Ethyl Acetate	.19742	.23876	20.93		
Vinyl acetate	.24907	.24991	.34		
Bromodichloromethane	.90707	.86162	5.01		
1,2-Dichloropropane	.32425	.28593	11.82	*	
cis-1,3-Dichloropropene	.64556	.59528	7.79		
Trichloroethene	.56460	.59932	6.15		
Benzene	.80724	.69992	13.29		
Chlorodibromomethane	.86710	.93963	8.36		

RF - Response Factor from daily standard file at 50.00 PPB
 RF - Average Response Factor from Initial Calibration Form VI
 %Diff - % Difference from original average or curve
 CCC - Calibration Check Compounds (*) SPCC - System Performance Check Compounds (**)

PROJECT RECORD

EMS-Heritage Laboratories, Indianapolis
Volatile Continuing Calibration Check

Sample ID : >2860D::D2 Inj Time : 931027 06:16 ID File : VOL624::SC

 Analyst : REGI Calibration File : CAL502::D3

 Mass Spec ID : GCMS#4 Last Calibration File Update : 921208 08:28

Calibration
 Data Files: 20 uG/L->9019D 50 uG/L->9020D 100 uG/L->9021D
 150 uG/L->9022D 200 uG/L->9023D

Minimum RF for SPCC is .3 Maximum % Diff for CCC is 25%

Compound	RF	RF	%Diff	CCC	SPCC
1,1,2-Trichloroethane	.30959	.30060	2.90		
trans-1,3-Dichloropropene	.60432	.56149	7.09		
Diisopropyl Ether	1.30774	1.01393	22.47		
2-Chloroethylvinylether	.13932	.13707	1.62		
Bromoform	.85657	1.08776	26.99		**
Methylisobutylketone	.18873	.27705	46.80		
D8 TOLUENE	1.22185	.99890	18.25		
1,1,2,2-Tetrachloroethane	.41069	.34295	16.49		**
Tetrachloroethene	.94500	1.27886	35.33		
2-Hexanone	.16921	.19928	17.78		
Toluene	1.22697	1.01440	17.32	*	
Chlorobenzene	.99456	.94946	4.53		**
Ethyl benzene	1.71364	1.48744	13.20	*	
styrene	.92791	.85052	8.34		
m-Xylene	1.48311	1.28861	13.11		
o,p-Xylene	1.44085	1.27850	11.27		(Conc=100.00)
BROMOFLUOROBENZENE	1.20475	1.24979	3.74		
m-Dichlorobenzene	1.32379	1.49552	12.97		
o,p-Dichlorobenzene	1.21443	1.32653	9.23		(Conc=100.00)

 RF - Response Factor from daily standard file at 50.00 PPB
 RF - Average Response Factor from Initial Calibration Form VI
 %Diff - % Difference from original average or curve
 CCC - Calibration Check Compounds (*) SPCC - System Performance Check Compounds (**)

PROJECT RECORD

HERITAGE LABORATORIES, INC
VOLATILES ANALYSIS-MEDIUM SOIL METHOD BLANK
ANALYSIS METHOD: SW846-8240

MASS SPEC FILE: >2861D
ANALYSIS DATE/TIME: 10/27/93 7:15

TARGET COMPOUND LIST	RESULT	UNITS	DET. LIMIT
Acetone.....	BDL	mG/KG	1.2
Acrolein.....	BDL	mG/KG	3.1
Acrylonitrile.....	BDL	mG/KG	4.3
Benzene.....	BDL	mG/KG	0.31
Bromodichloromethane.....	BDL	mG/KG	0.31
Bromoform.....	BDL	mG/KG	0.31
Bromomethane.....	BDL	mG/KG	0.63
Carbon disulfide.....	BDL	mG/KG	0.31
Carbon tetrachloride.....	BDL	mG/KG	0.31
Chlorobenzene.....	BDL	mG/KG	0.31
Chloroethane.....	BDL	mG/KG	0.63
Chloroform.....	BDL	mG/KG	0.31
Chloromethane.....	BDL	mG/KG	0.63
Dibromochloromethane.....	BDL	mG/KG	0.31
cis-1,3-Dichloropropene.....	BDL	mG/KG	0.31
Dichlorodifluoromethane.....	BDL	mG/KG	0.31
1,1-Dichloroethane.....	BDL	mG/KG	0.31
1,2-Dichloroethane.....	BDL	mG/KG	0.31
1,1-Dichloroethene.....	BDL	mG/KG	0.31
1,2-Dichloropropane.....	BDL	mG/KG	0.31
Ethylbenzene.....	BDL	mG/KG	0.31
Fluorotrichloromethane.....	BDL	mG/KG	0.31
2-Hexanone.....	BDL	mG/KG	0.63
Methylene chloride.....	BDL	mG/KG	0.31
Methyl ethyl ketone.....	BDL	mG/KG	0.63
4-Methyl-2-pentanone.....	BDL	mG/KG	0.63
Styrene.....	BDL	mG/KG	0.31
1,1,2,2-Tetrachloroethane.....	BDL	mG/KG	0.31
Tetrachloroethene.....	BDL	mG/KG	0.31
Tetrahydrofuran.....	BDL	mG/KG	1.6
Toluene.....	BDL	mG/KG	0.31
1,2-Dichloroethene (total).....	BDL	mG/KG	0.31
trans-1,3-Dichloropropene.....	BDL	mG/KG	0.31
1,1,1-Trichloroethane.....	BDL	mG/KG	0.31
1,1,2-Trichloroethane.....	BDL	mG/KG	0.31
Trichloroethene.....	BDL	mG/KG	0.31
Vinyl acetate.....	BDL	mG/KG	0.63
Vinyl chloride.....	BDL	mG/KG	0.63
Xylenes (total).....	BDL	mG/KG	0.31

SURROGATE LIST			spike conc
Dichloroethane-d4.....	119	% Rec	3.1
Toluene-d8.....	102	% Rec	3.1
Bromofluorobenzene.....	101	% Rec	3.1

() = ESTIMATED CONCENTRATION

PROJECT RECORD

From J.M. FFE (AWD)
 TO J.M. SMITH (IDEM)

Subject: Process Bldg NON-METALIC MATERIALS SAMPLING
 ENVIRONMENTAL SITE
 AWD Project 2396

AWD will perform the sampling of the Process Building materials with sampling personnel dressed in Level C Protective Clothing.

AWD will procure concrete block samples using a large chipping hammer to remove pieces of sufficiently size for analysis. The sample will consist of a composite of block pieces removed from the areas of the walls that appear visibly stained. One chip will be obtained from each block wall.

AWD will procure composite samples of miscellaneous debris by physically breaking off pieces to form the composite samples.

All samples will be packed in laboratory supplied containers with appropriate chain of custody forms attached.

J.M. FFE
 Resident site manager
 317 876-8829

PROJECT RECORD



INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
 105 SOUTH MERIDIAN
 P.O. BOX 6015
 INDIANAPOLIS, INDIANA 46206-6015

TO: <i>Jim Fyle</i>	TELEFAX #: <i>317/876-8829</i>
COMPANY/DIVISION: <i>AWD Tech, Inc.</i>	TELEPHONE #:

FROM: <i>Jim Smith</i>	TELEPHONE #: <i>317/233-6429</i>
COMMISSION & SECTION: <i>OER/Superfund</i>	NUMBER OF PAGES (INCLUDING COVER PAGE): <i>2</i>

DATE: *8/31/93*
 COMMENTS:
Review & Approval Sampling Process Bldg.

IDEM LOCATION	FAX NUMBER	CONFIRM NUMBER
CHESAPEAKE BUILDING		
Stores and Mail (Basement)	(317)232-5539	(317)232-8568
OSHWM File Room (9th Floor)	(317)232-3403	(317)232-3399
Enforcement (3rd Floor)	(317)233-5968	(317)233-5529
IDEM Commissioner (OEA, Comm. Use Only)	(317)232-8564	(317)232-8162
Water Management (6th Floor)	(317)232-8637	(317)232-8683
Water Management (4th Floor)	(317)232-8408	(317)232-8476
Air Management-Asbestos (4th Floor)	(317)233-3257	(317)233-3861
Legal Counsel (5th Floor)	(317)233-5517	(317)232-8753
IGCN-Room N1255		
Environmental Response/MIS	(317)233-6358	(317)233-6352
JACKSON SQUARE		
Air Management (3rd Floor)	(317)233-5685	(317)232-8467
Drinking Water Branch (6th Floor)	(317)233-4165	(317)233-4222
Air Management (4th Floor)	(317)233-5967	(317)232-8384
NORTHWEST REGIONAL OFFICE (GARY, IN)		
	(219)881-6745	(219)881-6712

PROJECT RECORD

From Jim Fife (AWD)

TO Jim Smith (IDEM) **PROJECT RECORD**

Subject: Process Bldg NON-METALLIC MATERIALS SAMPLING
ENVIRONMENTAL site
AWD Project 2396

AWD will perform the sampling of the Process Building materials with sampling personnel dressed in level C protective clothing.

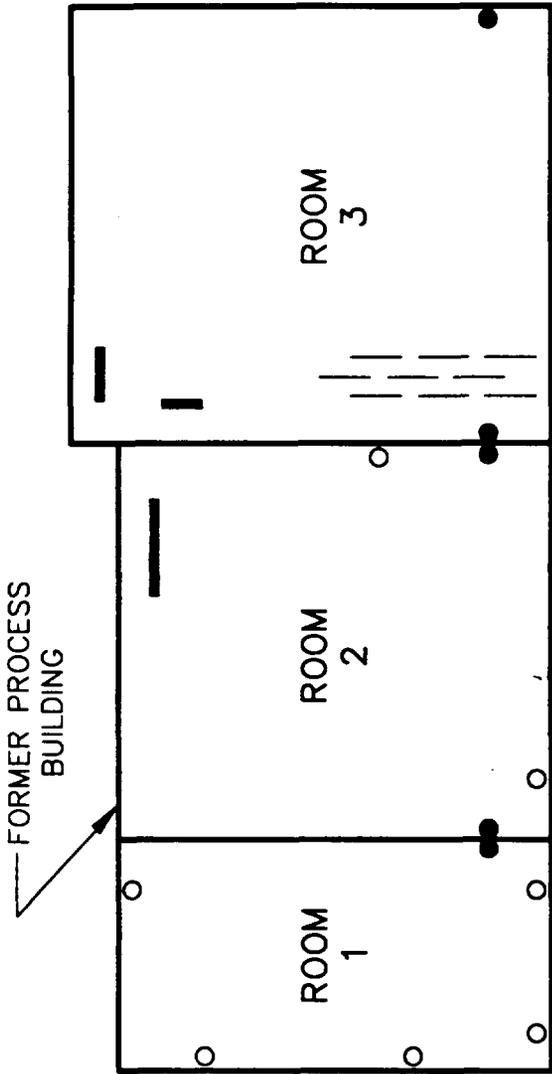
AWD will procure concrete block samples using a large chipping hammer to remove pieces - sufficiently sized for analysis. The sample will consist of a composite of block pieces removed from the areas of the walls that appear visibly stained. One chip will be obtained from each block wall.

AWD will procure composite samples of miscellaneous debris by physically breaking off pieces to form the composite samples.

All samples will be packed in laboratory supplied containers with appropriate chain of custody forms attached.

JR Fife
Resident site manager
317 876-8829

Reviewed & Approved
Jim Smith
IDEM/OER Manager
ECC Project
8/31/93 9:29am



LEGEND

- CONCRETE SAMPLE LOCATION - 4 FT. ABOVE GROUND
- INSULATION SAMPLE LOCATION - 3-4 FT. ABOVE GROUND
- STYROFOAM SAMPLE LOCATION - LYING FREELY ON GROUND
- WOOD SAMPLE LOCATION - LYING FREELY ON GROUND

PROJECT RECORD

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AWD TECHNOLOGIES, INC

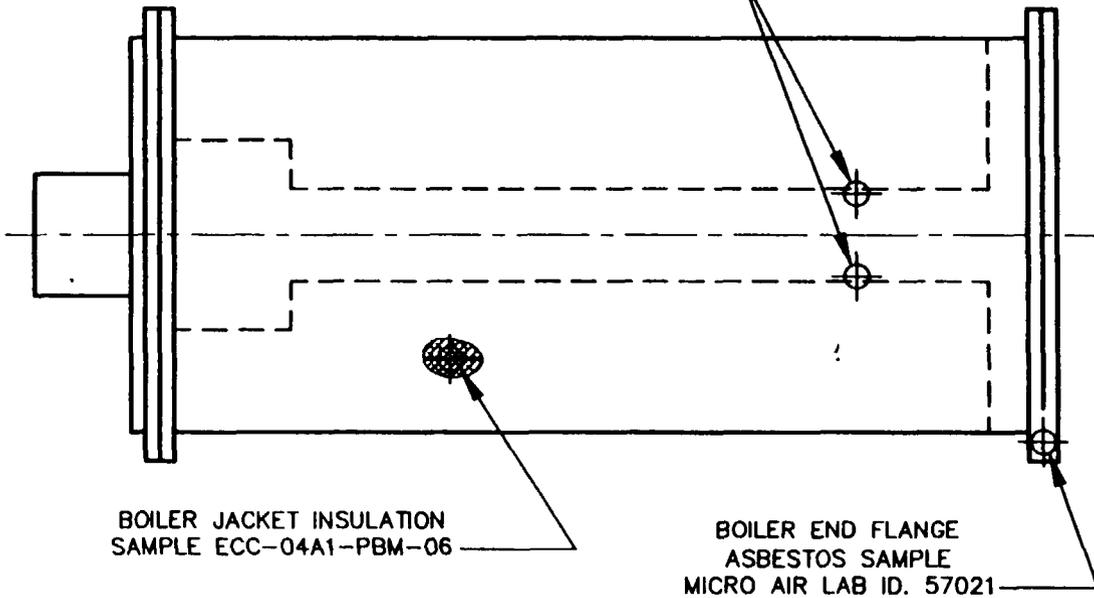


FORMER PROCESS BUILDING
SAMPLING LOCATION PLAN

ENVIRO-CHEM SUPERFUND SITE	ZIONSVILLE, IN
CLIENT: ENVIRONMENTAL CONSERVATION AND CHEMICAL CORPORATION TRUST	JOB NUMBER: 2396
SCALE: NOT TO SCALE	REV 0

PROJECT RECORD

INTERIOR BOILER
ASH COMPOSITE SAMPLE
ECC-04A1-PBM-08

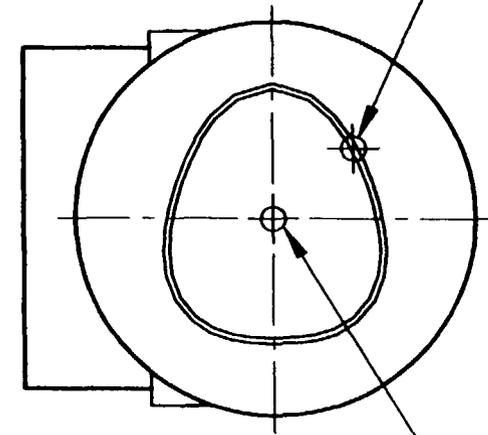


BOILER JACKET INSULATION
SAMPLE ECC-04A1-PBM-06

BOILER END FLANGE
ASBESTOS SAMPLE
MICRO AIR LAB ID. 57021

BOILER SIDE VIEW

BOILER SEAL
INSULATION SAMPLE
ECC-04A1-PBM-05



BOILER CERAMIC
ASH SAMPLE
ECC-04A1-PBM-07

BOILER END SEAL DOOR

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AWD TECHNOLOGIES, INC



BOILER SAMPLE LOCATION PLAN

ENVIRO-CHEM SUPERFUND SITE

ZIONSVILLE, IN

CLIENT: ENVIRONMENTAL CONSERVATION AND
CHEMICAL CORPORATION TRUST

JOB NUMBER: 2396

SCALE: NONE

FIGURE
NUMBER

G - 9

REV
0



Engineers
Planners
Economists
Scientists

Attachment - Moved
~~to~~ ~~Roll~~ to Roll
Box.

(Includes
3 Drawings / Detail Sheets)

Milwaukee Office

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414 272-2426
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